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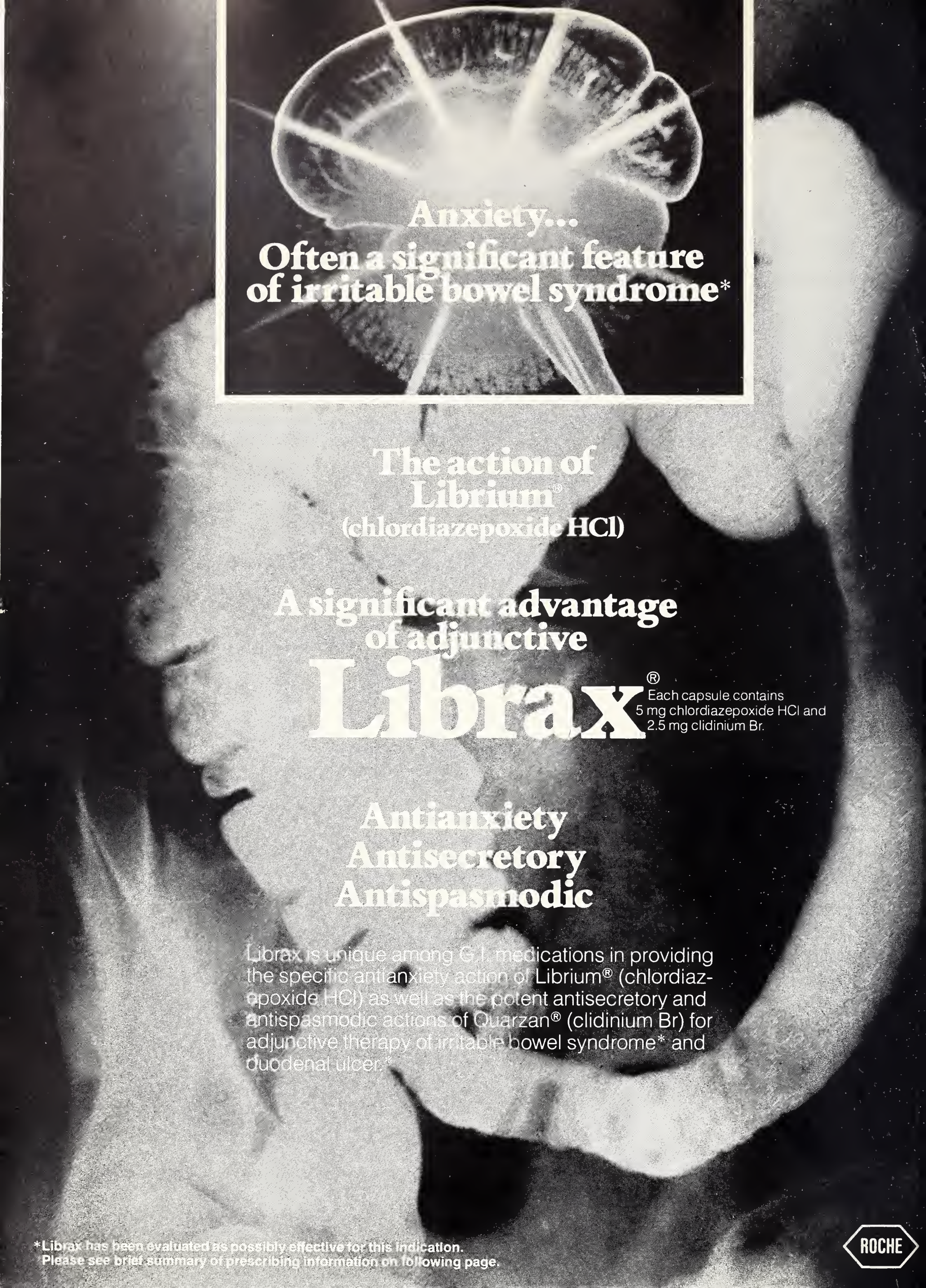
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ROCHE

The Role of Mammography in the Clinical Management of Diseases of the Breast

J. LUCIAN DAVIS, M.D.

Approximately 90,000 cases of carcinoma of the breast will be detected in the United States in the next 12 months, but this probably represents fewer than 10% of the patients with breast pathology who ultimately consult physicians. The vast majority of breast masses are detected by the patients, many of whom will represent a diagnostic problem necessitating breast biopsy.

The clinical indications for breast biopsy fall into two categories. The first is the patient who has a palpable mass in her breast and the second is the patient who has a nonpalpable lesion which is detected by mammography or xeroradiography.¹

Xerography and mammography are primarily screening procedures and are not to be used as diagnostic procedures in patients with a palpable breast mass. A palpable breast mass should be either aspirated for cytologic study or excised for histologic examination, regardless of the appearance on mammography or xerography. Although these x-ray procedures can detect both clinically palpable and clinically occult malignant tumors, a few clinically palpable breast cancers may not be demonstrable on radiographic exams, and similarly, those which may be interpreted as radiographically benign may in fact be histologically malignant. It can therefore be said that mammography has no place in the evaluation of clinically palpable, discrete masses. An

exception to this may be patients over 45 years of age who are undergoing breast biopsy for a palpable lesion, in whom mammography may be used to evaluate the presence of clinically occult lesions which could be biopsied at the same time the palpable mass is excised.

The role of mammography in the routine screening of asymptomatic women is at present a justifiably controversial subject. There is convincing evidence that high-dose ionizing radiation can cause breast cancer. Survivors of the atomic blasts in Japan who were calculated to receive over 90 R have been shown to have a two- to fourfold increase in the incidence of carcinoma of the breast when compared to non-exposed individuals.² Women who have received multiple fluoroscopic examinations in conjunction with collapse therapy for pulmonary tuberculosis also have been demonstrated to have up to a ninefold increase in the incidence of carcinoma of the breast ipsilateral to the lung treated with pneumothoraces. The incidence has been shown to correlate linearly with the dose received.³ More to the point, there are those who have suggested an increase in the incidence of carcinoma of the breast in women who have undergone repeated mammographic studies. On the other hand, studies by Strax and others⁴ have suggested that the five-year mortality rate for carcinoma of the breast has been reduced by the

use of repetitive clinical examinations and mammography.


Mammography is not a new concept. Leborgne in 1951 reported the use of x-ray examination of the female breast. This conventional film mammography, though effective, is accompanied by radiation doses of 3 to 6 R to the breast per examination. In more recent years, low-dose mammography and xerography have replaced conventional film mammography. Although opinion varies among radiologists as to whether low-dose film mammography or xerography is the more accurate, surgeons generally find xerography easier to interpret and more convenient for serial comparisons. It is also a more accurate method of examining biopsy specimens for completeness of excision of clinically occult lesions.^{5 (p 69)}

The examiner of the xeroradiograph looks first for the primary signs of malignancy—an irregular mass or microcalcifications. A benign neoplasm such as a fibroadenoma has a relatively uniform density and well-circumscribed margins. There is generally no increased vascularity in benign lesions, and calcifications when present are usually coarse and located at the periphery. In contrast, malignant tumors have spiculated or irregular areas within poorly defined borders, and calcifications appear scattered and finely stippled. In some cases no mass may be apparent at all and the finely stippled calcifications may be the only manifestation of a malignant tumor. A unilateral prominent ductal pattern, called asymmetric ductal collagenosis, may be an early finding in neoplasia, and a meticulous survey of the radiograph must be undertaken for underlying tumor. Secondary signs of malignancy, such as thickening of the overlying skin, skin retraction, nipple retraction, and obliteration of the retromammary space are usually seen only in clinically obvious breast cancers.^{5 (p 70)}

In clinically occult lesions, localization prior to surgical excision can be facilitated by several radiologic techniques. Routine cephalocaudad and lateral films usually allow localization of the lesion to one quadrant, with rough estimation of distances from fixed landmarks such as the areola. However, because the conformation of the breast changes markedly from the radiographic suite to the operating table, various radiographic techniques, such as placing needles into the mass or injecting a dye marker under radiographic con-

trol, can be of considerable assistance, especially in patients with large breasts. Once the specimen is removed, the pathologist and the radiologist should make a specimen radiograph to assure that the excised specimen includes the mammographic abnormality.

With the preceding statements in mind, it is reasonable to conclude that low-dose mammography or xeroradiography should not be performed without specific indications in women under 50 years of age. Women with a significant risk of developing breast cancer should probably be screened at two- to three-year intervals beginning at the age of 35, particularly if the breasts are difficult to evaluate clinically. This high-risk group includes patients with a positive family history of breast cancer, those who have had previous breast cancer in the contralateral breast, those who have never had children, and women with prior breast biopsies demonstrating evidence of premalignant lesions. After the age of 50, it is reasonable to screen all women at yearly intervals. Although as previously noted mammography may reasonably be utilized to screen for occult lesions in the patient with a palpable mass which is to be biopsied, it should not be used to determine the nature of a discrete mass.

In conclusion, it should be pointed out that even in mass screening programs, consisting of physical examinations and mammography at yearly intervals, so-called interval cancers are being detected. Some of these interval cancers have progressed to the incurable stage even within the period between examinations. This should be impetus to the physician to admonish his patient that yearly mammography is still no substitute for frequent self-examination. 

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Diagnosis of Unruptured Ectopic Pregnancy By the Use of the Laparoscope

I. RAY KING, M.D.; JAMES D. MYERS, M.D.; and JOHN R. SEMMER, M.D.

Introduction

The purpose of this paper is to present six cases of unruptured ectopic pregnancy diagnosed by laparoscopy and to encourage the use of the laparoscope in the early investigation of the clinical situation of a suspected ectopic pregnancy.

The early diagnosis of ectopic pregnancy has been an objective of physicians for many years. DeLee¹ stated that "no pelvic condition gives rise to more diagnostic errors. The author has seen such mistakes made by every gynecologist and surgeon in the city (Chicago), including myself." The use of clinical evaluation of history and physical examination proved to be correct in the diagnosis of ectopic pregnancy in only 56.6% of cases reported by Marchetti et al.² Culdocentesis can give the diagnosis of blood in the pelvic cavity but it does not define the source or amount of the blood. In two large series of cases, the incidence of no blood in the pelvis at the time of the diagnosis of ectopic pregnancy by laparoscopy or laparotomy varied from 7%³ to 17.7%² Therefore, the presence or absence of blood in the cul-de-sac does not indicate the proper diagnosis. Laparoscopy (peritoneoscopy) was recommended by Hope⁴ in 1937 for the diagnosis of ectopic pregnancy. Since that time, the laparoscope has been vastly improved, with better lens systems, light sources, and insufflation systems. Also, the availability of a trained laparoscopist is greater.

Materials and Methods

Ectopic pregnancies were reviewed at St. Mary's Medical Center for a 30-month period from Jan. 1, 1974, to June 30, 1976. These cases have been divided in three categories.

Group I. Seven patients were admitted with acute abdominal symptoms and/or hypotension. Laparoscopy was performed in one of these patients. In all seven cases, laparotomy was performed in less than two hours from admission.

Group II. Ten patients were admitted with the

symptoms of irregular uterine bleeding and abdominal or pelvic pain but without acute abdominal signs or hypotension. These patients did not have laparoscopy.

Group III. Six patients were admitted with irregular uterine bleeding and abdominal pain, but without hypotension or acute abdominal signs. Each of these patients had a diagnostic laparoscopy.

There were no deaths in any of the 23 patients. As an index to morbidity, the incidence of blood transfusion was evaluated (Table 1). As would be expected, those in group I had the highest incidence of transfusion, with 71% receiving blood. Group II had a 50% transfusion rate. None in group III had transfusions. Three patients in group II were observed in the hospital with symptoms suggestive of ectopic pregnancy for greater than 20 hours and progressed during this hospitalization to an acute situation which required laparotomy. These three patients accounted for three of the five transfusions in that group. Of the patients in group III, all had unruptured ectopic pregnancies at the time of surgery. The largest amount of intra-abdominal blood found in any of these patients was estimated to be 300 cc.

The site of the ectopic pregnancy was not mentioned in most of the records reviewed. Realizing that a rupture of the isthmic portion pursues a more rapid and dramatic course than that of an ampullary or fimbrial site, this information would be helpful. Of those in group I, one fimbrial implantation was noted. In group III, two were fimbrial and four isthmic. The first isthmic unruptured ectopic observed by two of us (IRK and JDM) showed a rupture of the

TABLE 1
INCIDENCE OF BLOOD TRANSFUSION

	No. of Patients	No. Receiving Transfusion	% Receiving Transfusions
Group I	7	5	71%
Group II	10	5	50%
Group III	6	0	0%

From St. Mary's Medical Center, Oakhill Ave., Knoxville, TN 37918.

serosa but the rest of the tube was intact and no bleeding was observed.

Discussion

Mortality from ectopic pregnancy is uncommon. It has been stated that in a well-staffed hospital, the mortality should be less than 0.5%⁵ In the period from 1971 through 1975 seven deaths from ectopic pregnancy were reported in Tennessee. In order to determine the mortality rate, the total number of ectopic pregnancies would need to be known. Ectopic pregnancies are not reported in Tennessee, therefore we will attempt to estimate the number. Schneider et al⁶ assumed an incidence of 1:100 live births to 1:200 conceptions in their computations of estimated national incidence and maternal mortality from ectopic pregnancy. At St. Mary's Medical Center during the period of study, there were 2,992 births and 23 ectopic pregnancies giving an incidence of 1:130 births. Taking the liberty of being a gross estimate, we would consider the incidence to be approximately 1:150 deliveries. During the period from 1971 through 1975, there were 327,726 live births in Tennessee.⁷ If our assumption of the incidence is correct, there would have been 2,184 ectopic pregnancies during this same period in Tennessee, which would give a maternal mortality from ectopic pregnancy of approximately 0.32%. During the same period, 1971 through 1975, there were 99 maternal deaths in Tennessee and seven of these were known to be due to ectopic pregnancy,⁷ giving an incidence of 7% of maternal deaths. This compares favorably with the incidence reported by Schneider et al⁶ of 7.4% in Michigan.

It is difficult to ascertain from the information available on the review of these patient records which of the patients in group I had symptoms suggestive of early ectopic pregnancy and to predict what their course would have been with an earlier laparoscopy. One of our personal patients in group I had symptoms of spotting and pain for seven to ten days prior to being admitted with acute symptoms. Certainly she would have benefited from a laparoscopic examination prior to her acute episode. The three patients in group II who were observed in the hospital for more than 20 hours would have benefited from less observation and earlier laparoscopy.

Novak⁸ said that "an ectopic pregnancy may

well be considered a disease of diagnostic surprises. The physician who has extrauterine pregnancy 'on the brain' will rarely fail to diagnose it when it exists, but he will diagnose it often when it is not present. On the other hand, one who is not alert to its possibilities will meet with many surprises which greater care could have avoided." We feel one has to have extrauterine pregnancy "on the brain" and use early laparoscopy to make the definitive diagnosis in suspected cases. One might question the unnecessary laparoscopies that would be done where an ectopic was suspected but not found. Twenty-seven other laparoscopies were reviewed during this study period and two of those had the preoperative diagnosis of possible ectopic pregnancy. Ectopic pregnancy was not found in either of these patients.

The basic cause of ectopic pregnancy is a delay in transport of the fertilized ovum to the uterus. Factors responsible for this delayed transport include peritoneal and tubal diverticula, fibrosis associated with tubal reconstructive surgery and possibly functional aberrations in tubal motility.⁹ Persons who have had pelvic inflammatory disease or tubal reconstructive surgery are in a high-risk category for ectopic pregnancy. In those patients who become pregnant after tubal sterilization, 16% to 24% will have ectopic pregnancies.¹⁰⁻¹¹ Three such cases were recently reported in which death occurred because ectopic pregnancy was not suspected.¹² Because of the marked increase in the number of patients having sterilization procedures, one should be aware of the increased incidence of ectopic pregnancy in this population.

Most medical students at the University of Tennessee Medical Units, Memphis, in the 1950s and 1960s became familiar with "Schreier's Rule" (named after Dr. Phil C. Schreier, former chairman of the Department of Obstetrics and Gynecology) that states: "A female in the reproductive age in shock has an ectopic pregnancy until proven otherwise." This is also a valid rule today but we would hope that by suspecting ectopic pregnancy and by the early use of the laparoscope, a smaller number of patients will present with hypovolemic shock.

In the clinical situation of amenorrhea followed by irregular or abnormal uterine bleeding accompanied by lower abdominal pain, the patient should be considered a suspect for ectopic pregnancy. If the attending physician is unable to do

a laparoscopy, then we feel the patient should be referred to a physician who can do this procedure. We would stress however that the patient who has evidence of hypovolemia should be operated upon immediately.

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FOCAL POINT

“Brothers, do not slander one another.” James 4:11

We learn two kinds of grammar during our growing up years. One has to do with the manner in which pronouns and verbs relate to each other. (For example, I *am*; you *are*; he *is*.) On the other hand, there is an interpersonal grammar that has little to do with English, and everything to do with the way we see ourselves and other people. In those declensions I look good; you look fair; but he looks miserable. For those who may have missed this aspect of grammar, the following list will help you to be piously correct.

<i>I am</i>	<i>You are</i>	<i>He is</i>
frank	candid	blunt
innovative	full of new ideas	a crack pot
humble	modest	suffering from an inferiority complex
possessed of a good self image	conceited	proud
husky	plump	fat
slender	thin	skinny
conservative	old fashioned	to the right of Attila the Hun
liberal	radical	a communist
firm	obstinate	pig headed
dedicated	extreme	a religious nut
a collector of rare art objects	interested in antiques	crazy about worthless junk
flexible	easy going	without a back bone
concerned	interested	a busy body
The way <i>you</i> and <i>I</i> look at it, <i>he</i> hasn't got a chance.		

—Haddon W. Robinson, Ph.D.
Executive Director
Christian Medical Society
(Reproduced with permission.)

Oral Contraceptive Steroids and Thrombophlebitis

A. W. DIDDLE, M.D.; WM. H. GARDNER, M.D.; P. J. WILLIAMSON, M.D.; J. R. JOHNSON, M.D.; J. L. HEMPHILL, M.D.; and C. W. GODWIN, M.D.

Controversy continues concerning oral contraceptive steroids predisposing of thrombophlebitis.^{1,2} Some studies indicate that daily doses of estrogens above 50 mg may trigger the problem whereas dosages of 50 mg or less do not.^{3,4} Since we have had a prolonged clinical experience (18 years) with the use of oral contraceptive medications, we believe some of our data merits recording.

Materials and Methods

The study series was taken from 8,686 consecutive private, nonindigent women seen by the authors during 1973 through 1975. The patients ranged in age from 14 to 46 years. Nearly all (98%) were caucasians. The remainder were of other racial groups. Excluded from the study were 1,255 patients whose contraceptive history was equivocal. Another 704 users of medication were also eliminated because of inadequate follow-up, leaving 4,250 users and 2,477 non-users of oral contraceptive drugs, who were the subjects of the study.

The mean age of the treated women was 26.3 and of the untreated 29.4 years. Forty-seven percent (2,332) of the former and 26% (724) of the latter were nulligravida. The other women were or had been gravid one or more times.

Initially each woman had a complete physical examination with Pap smear, and past and family history were taken. Eighty-seven percent (4,250) of treated women had a follow-up at least annually. The other 13% (704) either never returned for consultation or the time had not arrived for their return when the study was closed. The untreated patients often returned less frequently.

In order to ascertain the most complete analysis of the relationship between thrombophlebitis and the use of oral contraceptives, detailed analyses were performed on all appropriate data. Rates in this study are presented in both crude and adjusted form. The method of Linder and Grove was used for the adjustments. Statistical sig-

nificance was determined using the G-test, chi-square analysis and analysis of variance. For comparing adjusted rates the approach outlined by Mantel and Haenszel was used.

Diagnosis:

Recognition of thrombophlebitis was based on a history of clinical evidence of redness, pain, or swelling along the course of a vein. Pulmonary emboli were identified either by radiologic or clinical examination, or both.

Medications:

Oral contraceptive steroids were prescribed on request of the patient. Medication was given orally, usually for three out of each four weeks. With the progress of time, medication containing 50 mg of estrogen was used rather than a larger amount. On the contrary, the presence of acne, hirsutism, obesity, menstrual irregularities, or side reaction to another drug sometimes modified the selection (Table 1).

Oral contraceptive steroids were taken by 4,250 women for 1 to 156 months each for a total of 9,621 woman years. The fact that a larger percentage of controls were older than the treated patients and had been gravid appeared to be modified by two things: (1) more of the controls elected at a younger age not to use oral contraceptive medication because of adverse publicity, and (2) they were less concerned about prevention of conception. Otherwise, there was no apparent sociologic difference between the two groups of women.

Medication was changed one or more times for 675 (16%) of the women for reasons noted above.

Results

Thrombophlebitis:

Thirty of the 4,250 treated women had thrombophlebitis either before, during, or after the use of an oral contraceptive drug. All recovered. The number of patients affected in each of the above time periods were 3, 11, and 16, respectively. The 19 women affected while off medication had

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TABLE 1
TYPE OF ORAL CONTRACEPTIVE MEDICATION
AND INCIDENCE OF THROMBOPHLEBITIS

Drug	No. Using Drug	No. Unafflicted While On Drug	No. Afflicted While On Drug	Total Mos. Experience
Norethindrone with mestranol*	874	872	2	30,300
Norethindrone acetate with ethinyl estradiol†	775	774	1	21,723
0.5 mg norgestrol with 0.5 mg ethinyl estradiol	753	751	2	13,207
1 mg ethynodiol diacetate with 0.1 mg mestranol	599	598	1	15,456
25 mg dimethisterone with 0.1 mg ethinyl estradiol	305	304	1	11,957
1 mg ethyndiol diacetate with 0.5 mg ethinyl estradiol	218	217	1	5,881
2.5 mg norethyndiol with 0.1 mg mestranol	163	162	1	5,418
Unspecified	563	561	2	11,514
TOTAL	4,250	4,239	11	115,456

* Approximately an equal number of women given 100, 80, and 50 mg mestranol. One patient for each of two latter dosages had phlebitis.

† A half of patients given 2.5 mg and the other half 1.0 mg content norethindrone acetate with 50 mg estrogen. One patient in the last group had phlebitis.

either not taken or had been off medication 4 to 96 months each when they suffered their illness. One woman had phlebitis in the left leg several months before and after taking 1 mg of norethindrone acetate with 0.05 mg ethinyl estradiol. Seven other women experienced the complication postpartum or after surgery. A ninth woman had an exacerbation of ulcerative colitis complicated by phlebitis eight months after she ceased taking medication. The next ten patients either had large varices of the legs, suffered a physical injury, had chronic medical disease, or showed no apparent predisposing cause for the illness. The last 11 women suffered thrombotic disease while on an oral contraceptive drug. One of these also had a pulmonary embolus (Table 1).

Type of Medication:

Table 1 illustrates the relationship between the use of various oral contraceptive steroids and the incidence of thrombophlebitis. Medication containing 50 mg of estrogen was taken by 2,320 patients while 1,359 others took 80 to 100 mg. The corresponding numbers of women afflicted while on medication in each group were five (0.2%) and four (0.29%). The amount of estrogen taken by another 663 women was unknown. Two of these had phlebitis while on treatment. The specific type of drug taken did not significantly affect the incidence of thrombophlebitis ($P < 0.5$).

Clinical Conditions:

Associated clinical conditions significantly affected the incidence of thrombophlebitis in both treated and untreated patients ($P < .01$) (Table 2). Use of oral contraceptive drugs and gravid or postpartum status affected the incidence more than other conditions. But there was no significant difference in the relationship of clinical conditions and the incidence of thrombophlebitis between the treated and untreated groups of patients.

Gravidity:

The relationship between the number of patients affected by thromboembolic disease and

TABLE 2
THROMBOPHLEBITIS AND OTHER
ASSOCIATED CLINICAL CONDITIONS

Clinical Condition*	Treated	Untreated
On an oral contraceptive	11	0
Gravid or postpartum	4†	14
Postoperative	3	2
Cardiac disease or hypertension	3	2
Obesity	3	5
Unexplained	6	2
Major physical trauma	1	1
Other Chronic Medical Disease	2	0
TOTAL	30	20

* Some women affected by more than one condition.

† Before or after the use of an oral contraceptive.

"THE PILL"/Diddle

gravidity is shown in Table 3 for both treated and untreated groups.

The adjusted rate for treated patients was 7.7 and for untreated 7.2 per 1,000 as opposed to 7.1 and 8.1 for unadjusted rates.

Incidentally, more than 10%, or 44, of the 4,250 treated women discontinued their medication and conceived. Two of the 444 had thrombophlebitis postpartum. Likewise, 3.8% (161) of the untreated women conceived again while under our care. Four of these acquired thromboembolic disease. Those affected women who conceived again were 26 years old or more. Women previously gravid in both series were more prone than nulligravida to thrombophlebitis.

Location of Thrombotic Disease:

The areas of the body involved with thrombotic disease are shown in Table 4. All the pulmonary emboli but one were associated with pregnancy or the postpartum state. The exception was following cardiac surgery.

Thrombophlebitis occurred significantly more often in all patients in the deep veins of the legs ($P < .05$). There was no statistical difference in the site affected between the treated and untreated groups.

Cardiac or Hypertensive Disease:

Two women given oral contraceptives and afflicted with phlebitis were moderately hypertensive, with pressures ranging from 140 to 160 mm Hg systolic and 88 to 100 mm Hg diastolic, as contrasted to one untreated woman. All other women with thrombotic disease were normotensive.

None of the afflicted women who were taking oral contraceptive steroids had cardiac disease. Contrariwise one of the untreated patients in her late 30s had chronic rheumatic heart disease. She had thrombotic disease and a pulmonary embolus following cardiac surgery.

Body Weights:

Accurate weights were known at the time of their thrombotic complication for only 25 treated and 17 untreated women. Respectively, one (4%) and five (30%) weighed 80 kg or more. The others weighed 70 kg or less and were considered to have weights essentially normal for their height and age.

Age of Patient:

The incidence of thrombophlebitis was examined with regard to the age of the patient for treated and untreated women. Although there was no overall significant difference between the cases of phlebitis according to the time of onset, significantly more treated women were affected in the 21-30 age group (Table 5).

The age adjusted rate for treated patients was 8.0 as opposed to 7.2 per 1,000 for the untreated women compared with unadjusted rates of 7.1 and 8.1 respectively.

The appropriate Mantel and Haenszel test applied to the age adjusted rates in both groups showed no significant difference ($P < .05$). There was no significant relationship found among the three factors, when the three were age of patient, type of treatment, and gravidity considered together ($P < .05$).

Results in Table 6 may be compared with the crude general incidence of thrombophlebitis in a large patient population at the Medical College

TABLE 3
THE INCIDENCE OF THROMBOPHLEBITIS
FOR TREATED AND UNTREATED WOMEN
ACCORDING TO GRAVIDITY

Gravidity	Treated			Untreated		
	With Phlebitis	Without Phlebitis	Total	With Phlebitis	Without Phlebitis	Total
0	6	1,991	1,997	2	722	724
1	7	1,078	1,085	3	666	669
2	11	730	741	9	563	572
3 or more	5	421	426	6	506	512
Unspecified	1	0	1	—	—	—
TOTAL	30	4,220	4,250	20	2,457	2,477

of Virginia.⁵ The disease increased from 0.8 per 1,000 for women 15 to 24 years old to 1.26 for those 35 to 44 years of age.

Comment

Goldzieher and Dozier¹ recently made a comprehensive statistical evaluation of the literature relating the use of oral contraceptive steroids to thrombotic complications. They were not able to document, to their satisfaction, a direct cause and effect relationship. Some investigators have strongly disagreed with their analysis,⁶ and the controversy has been stirred to a greater heat than existed before their report. Although our study lacks some of the statistical style recommended by Goldzieher and Dozier, we do not find an appreciable difference in the incidence of thrombotic disease among users and nonusers of

the oral contraceptives when age and gravidity were given consideration.

Vessey and Inman³ and the Boston Collaboration⁴ study observed a rise in the morbidity from thrombotic disease when the amount of estrogen given daily exceeded 50 mg as compared to 50 mg or less. Our study indicates a small difference in that direction.

TABLE 4
SITE OF THROMBOTIC DISEASE

Site of Disease	Treated	Untreated
Deep viens of legs	24	15
Pulmonary and pelvic area	1	4
Superficial: arms of legs	4	0
Not designated	1	1
TOTAL	30	20

TABLE 5
INCIDENCE OF THROMBOPHLEBITIS
ACCORDING TO AGE OF PATIENT
FOR TREATED AND UNTREATED GROUPS

Age Group	Treated				Untreated	
	Total	No. with Phlebitis	No. Afflicted while on Drugs	No. Afflicted while off Drugs	Total	No. with Phlebitis
Under 16	14	0	0	0	34	0
16-20	1,299	3	1	2	436	0
21-25	1,674	11	3	8	595	4
26-30	729	9	5	4	511	7
31-35	300	5	1	4	382	3
36-40	142	2	1	1	265	3
41-45	92	0	0	0	254	3
TOTAL	4,250	30	11	19	2,477	20

TABLE 6
INCIDENCE OF THROMBOPHLEBITIS RELATED WITH
THE ORAL CONTRACEPTIVE STEROIDS

Type Population	Per Thousand Patients		Reference
General	Untreated	7-1	Pincus ⁷
	Treated	2.2	
Various	Untreated	0.58-2.8	Goldzieher & Dozier ¹
	Treated	0.61-1.29	
Knoxville hospitals	Untreated	1.2	Diddle et al ⁸
	Treated	2.0	
General clinic	Both untreated and treated under age 45 years		Marsland et al ⁵
		1.0	
Current study	Untreated	0.81	
	Treated*	0.71	

* Incidence while on progestogens 0.26%.

There was an equivocal trend for treated, previously gravid women, age 20 to 30 years inclusive, to have an incidence of thrombotic disease higher than the untreated women of similar age. The overall ages of 15 to 45 years, however, showed no significant difference in the incidence of the disease between treated and untreated patients ($P < .05$).

Table 6 lists some previous comparative studies of the incidence of thrombotic disease and oral contraceptive steroids. The source of Pincus⁷ data is unknown. Goldzieher and Dozier¹ made comparative studies from the literature, breaking down the source as to antepartum state, hospital admissions, United States National Disease Index, physician visits by users and nonusers of oral contraceptives, and for combination versus sequential oral steroids. The corresponding percentages were 0.51 to 0.71; 0.7 to 1.08; 1.2 to 3.0; 1.3 to 2.48; and 0.61 to 1.29. In the case of physician visits, former contraceptive users experienced the illness 1.9% as opposed to 2.48% for nonusers. They also found that parity of the patient was important in this controversy.

The data from the hospitals⁸ were accumulated by a comprehensive survey made in conjunction with the Knoxville Surgical Society.

The more recent analysis by Marsland and his associates⁵ concerns 88,000 patients, more than a half of whom are females. These people presented themselves to one or more of 118 physicians in a period of several months, giving 526,196 consecutive problems. It is not stated in their report how many women were 15 to 46

years old, but it does indicate indirectly that there was a significant number of women seeking contraceptive advice. So the figure of 1% is a general one.

The controversy of thrombotic disease among users versus nonusers of oral contraceptive drugs, in our opinion, reduces to a difference so small that we believe the good balances the bad. Until a chemical means or some other method is available to discern who should not take oral contraceptive medication, we will counsel our patients that the risk of mortality and morbidity is at least as great if not greater from pregnancy than from the use of these drugs.

Acknowledgments:

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We are indebted to Mary L. Van Cleave, M.S., of the Center for Health Statistics, Tennessee Department of Public Health, for the statistical analyses.

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But every difference of opinion is not a difference of principle. We have called by different names brethren of the same principle. We are all Republicans, we are all Federalists. If there be any among us who would wish to dissolve this Union or to change its republican form, let them stand undisturbed as monuments of the safety with which error of opinion may be tolerated where reason is left free to combat it.

I know, indeed, that some honest men fear that a republican government can not be strong, but this Government is not strong enough; but would the honest patriot, in the full tide of successful experiment, abandon a government which has so far kept us free and firm on the theoretic and visionary fear that this Government, the world's best hope, may by possibility want energy to preserve itself? I trust not.

I believe this, on the contrary, the strongest Government on earth. I believe it the only one where every man, at the call of the law, would fly to the standard of the law, and would meet invasions of the public order as his own personal concern. Sometimes it is said that man can not be trusted with the government of himself. Can he, then, be trusted with the government of others? Or have we found angels in the forms of kings to govern him? Let history answer this question.

Thomas Jefferson

FIRST INAUGURAL ADDRESS

MARCH 4, 1801

Eight Months' Experience in Head CT Scanning Utilizing a General Electric Whole Body (CT/T) Scanner

CHARLES T. FAULKNER, M.D.

Introduction

The purpose of this paper is to review the experience of head scanning during the first eight months of operation of a head-whole body CT scanner in the setting of a private in-hospital practice.

Materials and Methods

A total of 736 patients were examined with a GE Total Body Scanner which uses a pulsed fanbeam traveling 360 degrees per scan. Rotation of the beam per scan is 4.6 seconds and the pulsed frequency of the beam is 288 pulses per 360 degrees. Pulse duration varies from 1 to 6, each integer representing a 1.1 msec pulse duration. A kvp of 120 is used for the scanning sequence. Pulse duration and mas vary from patient to patient and are determined by a single technique scan taken at 120 kvp, 40 mas. A Lexan head holder is employed except in cases where the head is too large for the holder (i.e., hydrocephalus).

Results

The diagnoses inferred from the 736 head scans are given in Table 1.

Discussion

The majority of patients (59%) were normal or had mild cortical atrophy. The next largest group of patients had moderate to severe atrophy so that nearly 70% of patients were normal or had some degree of atrophy. A presumptive diagnosis of normal pressure hydrocephalus had been made in five patients. Surprisingly, in our practice the number of primary brain tumors is greater than metastatic tumors and is equal to the number of vascular abnormalities. Five of the 19 patients (26%) with the CT findings of metastatic disease had normal radionuclide brain scans. Seven of the 31 patients (23%) with primary brain tumors had negative radionuclide brain scans (one acoustic neuroma, two gliomas,

From the Department of Radiology, Park View Hospital, Nashville, TN 37203.

TABLE 1
RESULTS OF 736 HEAD SCANS

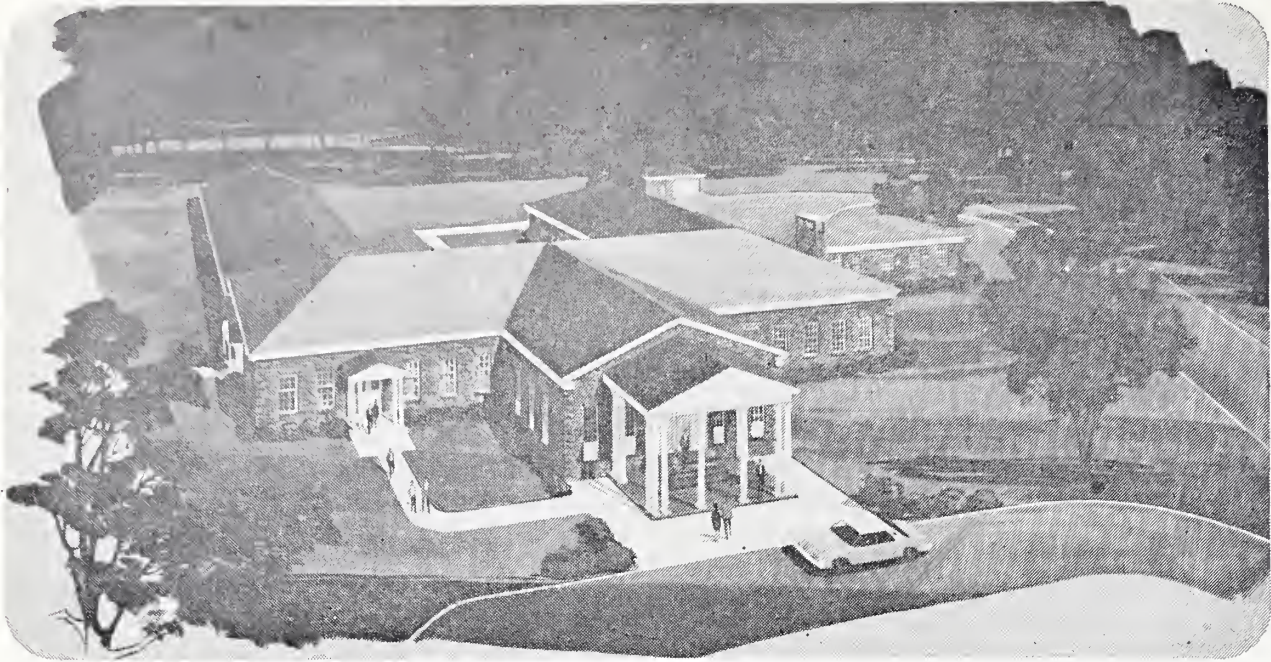
Diagnosis	Number of Patients	
Normal or mild atrophy	433	(59%)
Moderate or severe atrophy	138	(19%)
Vascular abnormality	31	(4%)
recent infarction	21	
AVM	1	
hemorrhage	7	
aneurysm	2	
Primary neoplasm	31	(4%)
glioma	19	
acoustic neuroma	3	
meningioma	5	
pituitary adenoma	3	
vascular choroid plexus tumor	1	
Metastatic neoplasm	19	(3%)
Infection (abscess)	2	(0.2%)
Truama	7	(1%)
Residual of old strokes or trauma	28	(4%)
Miscellaneous	27	(4%)
edema	4	
Paget's skull	1	
orbit tumor	1	
soft tissue (scalp) tumor	1	
Graves' ophthalmopathy	1	
carcinoma maxillary sinus	2	
ostoma (skull, sinus)	2	
nasal tumor	1	
carcinoma auditory canal	1	
arachnoid cyst	1	
obstructive hydrocephalus	4	
normal pressure hydrocephalus	5	
facial fracture	1	
postoperative sellar fibrosis (gliosis)	1	
optic neuritis	1	
Equivocal scans	15	(2%)
TOTAL 736		

two pituitary adenomas, two meningiomas). All of the patients with traumatic hematomas or contusions had negative radionuclide brain scans.

Conclusion

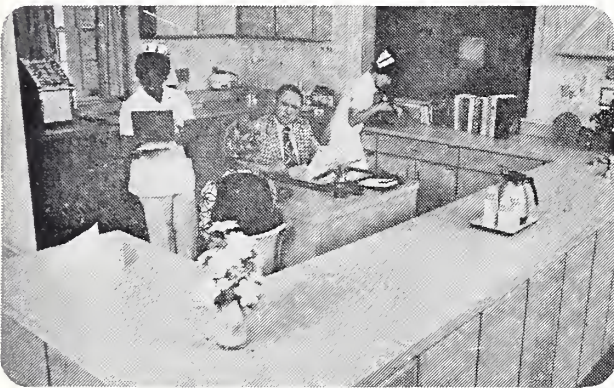
The results of the first eight months of operation of a GE Whole Body Scanner are given relative to 736 head scans performed. Besides documenting atrophy, it appears the CT scan is superior to radionuclide brain scanning in the diagnosis of metastatic and primary brain tumors, as well as in cases of head trauma.

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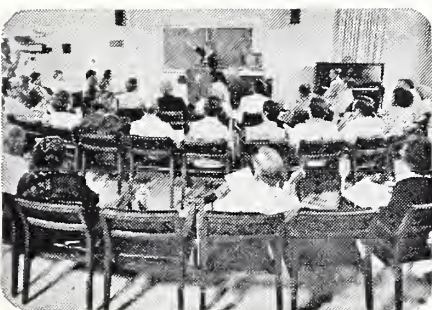
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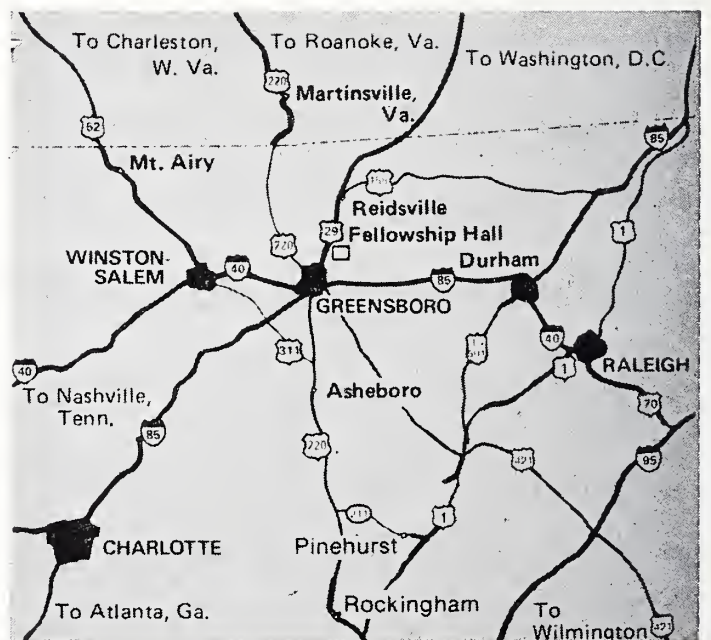
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American Health Scene—Vintage 1977

TOM E. NESBITT, M.D.

I guess the greatest personal enjoyment an individual gets in going through this particular role in American medicine is the opportunity to meet so many great men and women around the country. I've become more and more impressed, as I go to state meetings and county society meetings and meet with leadership groups and with other groups of physicians, that there is no finer group of men and women anywhere in this country. I'm equally impressed with the younger physicians and medical students who are joining our ranks at the rate of 5,000 additional ones every year and now total 30,000. It's an impressive opportunity to meet them. This country is very fortunate in the caliber of men and women who enter medical school and graduate and go through their residency training programs.

As I look at the American health care scene, vintage 1977, I'm impressed with several things. I've felt for a long time that one needs to look at things from the historical standpoint. When I think of what's happened to us in medicine for the last decade or so from a historical standpoint I have numbers that keep coming back into my thinking. I'm sure most of you are familiar with them. I think of 89-97, 92-603, 93-641, 94-484, 95-142, 535, and I am sure all of you know what these are. If you don't, let me remind you. PL 89-97 was Medicare-Medicaid. PL 92-603

I feel there is little doubt that the general thrust and movement for this country is toward a national health service.

was PSRO. PL 93-641 was the National Health Planning and Development Act. PL 94-484 was the Health Manpower Bill of the last session of

Adapted from a presentation before the Nashville Academy of Medicine quarterly membership meeting, Nashville, Sept. 6, 1977.

Dr. Nesbitt is president-elect of the American Medical Association.

Congress. PL 95-142 is the recent Talmadge Act on Medicare and Medicaid changes aimed toward fraud and abuse, two words that should never be used synonymously. 535 happens to be the address on North Dearborn of the AMA office.

As I think about these groups of numbers and how they apply to our profession, I feel there is little doubt that the general thrust and movement for this country is toward a national health

We as a profession [must] begin to understand among ourselves and explain to the public the difference between medical care and health care.

service. Within the broader scope of legislation affecting the medical profession there is also the challenge that we face in dealing with regulatory bodies which have been given broad latitude in developing regulations for implementing each new law passed by Congress. Many of those mandates which affect our profession are aimed very particularly toward a national health service.

But interestingly enough, the action differs from the approach which was used in Great Britain. Government has not made a frontal attack on us. It hasn't said directly, "We have to have a national health insurance and a national health service." It's perceived that the American people aren't really ready to accept this sort of imposition on their activities. Government is approaching it from a flank attack. It is approaching it from the concept of a crisis in medical care, predicated on the concept that we're short of physician manpower. Remember when government spokesmen said we were 50,000 physicians short and then they approached it from the standpoint of not only inadequate access to care but the quality of care?

And currently what are we hearing? We're hearing about the *cost* of medical care. When they told us we were short 50,000 physicians,

they didn't query us and learn that we had on the drawing board plans to expand medical education in the university teaching centers of this country that would increase the output of doctors in a decade from 7,500 a year to almost 15,000 a year today, nor that we would expand our medical schools from 88 to 116. They didn't realize that we were conducting peer review and had tissue review committees. All these things

Why is it bad to spend your money on medical care but good to spend money on automobiles? Because about 40% of those dollars are coming from the federal budget.

were already in place. All we had to do was give them some financial support and let the voluntary system of this society of ours operate in a normal free enterprise environment. They didn't do that. Instead they've imposed a long series of regulations, and the reason they've imposed them is because down the road they're looking toward a national health service.

I'll talk more about that in a moment, because right now the concentration is on the cost of medical care. Before I expand on that I think it's imperative that we as a profession

individual health. That's what health care is. You and I as physicians and as a part of the medical profession have a responsibility to participate in a definition of what's important in health care from a medical standpoint. But I'm tired of hearing the bureaucrats, the health planners, and the economists lay all the ills of the *health care* system of this nation at the doorstep of the medical profession. We don't deserve it. We should speak out against this and we should let them know the difference between medical care and health care.

What are they telling us about health care costs? They're telling us first of all that there is a very simple remedy. Mr. Califano said all you have to do is move in and put the lid on revenues of the hospitals of the country because 40% of the medical care dollars are spent in our hospitals. So all you have to do is put a lid on their revenues and, friends, you will stop the escalating costs of medical care. That's a ridiculous, simplistic solution to a major problem facing this country. It's a paradox that we can pick up the *Wall Street Journal*, as I happened to do one day a few months ago, and on the front page on the right hand column find a story stating how great it was that the economy was improving because more people were buying automobiles in the last quarter. And in the left-hand column

There has been a fantastic increase in demand for medical care services generated because of the expanded coverage of health care insurance, a great deal of it initiated by government There is a fantastic increase in expectation and demand for services because of increased medical knowledge on the part of the profession and . . . the public.

begin to understand among ourselves and explain to the public the difference between medical care and health care. We use the terms synonymously and yet we know there is a difference. But we never get out and differentiate the fact that we as physicians are trained to diagnose the presence and absence of disease and to treat such disease when it's present. When we talk about health care, we are talking about an entirely different subject. Medical care is a part of it. But we're talking about the environment we live in, the air we breathe, the water we drink, our lifestyles, whether we drink too much, or smoke excessively, or drive our automobiles too fast, or don't exercise enough—how we, you and I and the public we serve, need to take on the responsibility of looking after our own personal,

on the front page was an article saying how terrible it is that more people are also spending more money on their medical care. Now why is it bad to spend your money on medical care but good to spend money on automobiles? I'll tell you why: because about 40% of those dollars are coming from the federal budget and the health planners and the government people want to shrink the dollars that are spent out of the federal pocketbook and cut down the gross national product participation of the medical care dollar so they can spend it in other areas to expand the bureaucracy. That's one good reason.

But when they give us a simplistic solution to a very difficult and complicated problem, they fail to analyze the factors that have created the rapid rise in the cost of medical care. They

never once recognized that a substantial part of the costs is due purely and simply to inflation. They never acknowledge the fact that there has been a fantastic increase in demand for medical care services generated because of the expanded coverage of health care insurance, a great deal of it initiated by government. They fail to acknowledge that there is a fantastic increase in expectation and demand for services because of increased medical knowledge on the part of the profession and on the part of the public. In my view, that's a great tribute to the expansion of medical and scientific technology in the last decade in this country.

It is imperative that we as a profession understand and be willing to accept our responsibility to become a part of the solution to the cost restraint problem.

Look at the product our hospitals turn out today as compared with 20 years ago! It's not the same old product being refurbished. It's an entirely new product, much more expensive, characterized by coronary care units, intensive care units, expanded emergency rooms and neonatology centers—all of these new services, services that weren't available 20 years ago. You and I know perfectly well that our patients, the American people, don't want to go back 20 years and start getting the product that was available when I started practicing medicine in Nashville 20 years ago. They wouldn't be satisfied with it. What do you think the hospital administrators would do if indeed they had to limit their revenues to 9%? They would begin to close coronary care units, the intensive care units, neonatology, the pediatric beds, and most importantly, they would look long and hard at the dollars they are spending on graduate medical education in our residency programs. That's what would begin to suffer. So we are talking about a decrease in the *quantity* and the *quality* of medical care that would result from this sort of activity on the part of federal government.

If we are really going to approach realistically this problem of costs, it's imperative that we analyze the causes of these costs of care. You add to the things I've already mentioned the problem of professional liability premiums—\$2.5 billion last year, \$1 billion from the profession

and \$1.5 billion from the hospitals—plus the costs of the technological equipment and all the other factors, and you end up with an accumulation of inescapable costs of medical care. What should we do about it? How should we as a profession approach it?

There are two vital areas. First of all, we have to make certain that we oppose any simplistic solution offered by government or planners, such as the one related to the cost of hospital care offered by Mr. Califano. Secondly, it is imperative that we as a profession understand and be willing to accept our responsibility to become a part of the solution to the cost restraint problem. I think we are doing that. Let me give you three or four significant examples.

To begin, 18 months ago at the national level we formed a National Commission on the Cost of Health Care. It is the first one ever established that crosses all sectors of our nation's economy. It has 27 members, representatives from organized labor, from industry, from the Congress, from the health insurance industry, from the profession, from academia. They form a group of extremely qualified and interested individuals who are serving extremely well. Their report is due sometime between the 1st and the 15th of December. We expect them to have 40 or more recommendations. We know that there will be things in there that labor won't like, that industry won't like, that you and I won't like. But I think there will be a basis of accord on measures we can take that will restrain the rate at which medical care costs are rising, particularly in our hospitals.

If we don't . . . we will begin to see rationing of the quality and the quantity of medical care in this country. This isn't acceptable to you and me nor to the people of this country.

Two particularly good examples of cost justification have come to my attention recently. If you have access to the *Archives of Surgery*, you should read the editorial in the September issue written by the chief of surgery in Denver—Ben Isenman. In this editorial, Dr. Isenman describes his Morbidity and Mortality Conference, which he holds weekly at the University

of Colorado. A few months ago, he added a new ingredient to that conference. He now has what he calls "an economic M & M case" each week. He takes a simple hernia or a gallbladder or a complicated burn or colon resection and gets that patient's hospital bill out and dissects that case in terms of cost. What does this do? It shows his housestaff, his full-time academic group, his attending men what constitutes the cost of medical care in that individual case and lets doctors know how they are spending their patients' dollars in the hospital. Very effective! And he lays the challenge at the door of academia and says, "You know, we've long since neglected our obligation to teach our housestaff and our attending men what it costs to take care of sick people and how to do it properly." I hope that kind of cost examination becomes contagious throughout the medical centers of this country as well as in our large private community hospitals. It would be most valuable.

that level now for a number of months, with no increase in morbidity and mortality. Look at the money they're saving their patients. I think those are beautiful examples of what we as a profession should think about in our approach to some control over this escalation of the rates of hospital costs.

One other thing happened recently. Rep. Dan Rostenkowski of Illinois, who is chairman of the Health Subcommittee of the House Ways and Means Committee, made a speech on the floor of the House in which he issued a challenge to the American Medical Association, the American Hospital Association and the Federation of American Hospitals. (The FAH is the investor-owned hospital group—Hospital Corporation of America, Hospital Affiliates, and all the others.) He challenged them to involve the voluntary, private medical segment of this nation to begin to provide constructive approaches to resolve the issue of costs. The challenge has

"The sterling quality that exists in the United States today is unparalleled in the world, and the rest of the world looks to you to retain it and to continue to preserve it. That's your obligation to this profession." Our professionalism is being threatened today as never before—our professionalism as we think of it in the context of quantity and quality of care.

I encountered another good example in Washington, D.C. a few weeks ago at their annual scientific session. I elected to go to one of the sessions where a young infectious disease man was talking about urinary tract infections, a logical thing for me to choose. (I haven't had time to get my Category 1 CME credits in yet.) The speaker described a study he'd conducted in Madison, Wis. They had looked at the cost of the pharmacy and what they expended on pharmaceuticals in the university hospitals, the VA hospital, and the large community hospital. They found 56% of the total expenditures of the pharmacies of those three institutions were for two generic groups of antibiotics, the cephalosporins and the aminoglycosides. So they said, "Well, let's see if this is proper."

At the VA hospital they instituted a system where before the third dose of either of those antibiotics was given, the individual ordering the antibiotic had to justify its use in the chart. The use of cephalosporins and aminoglycosides dropped precipitously in that institution. It's stayed at

been accepted and highly publicized. The AMA, the AHA and the FAH agreed jointly to appoint a steering committee that will, within 90 days, define what constructive approaches we as a profession can introduce in the institutions where we practice and in our offices to rationally examine the methods we use and how we can help control the escalating rates of medical care.

I think those are excellent examples of what the profession can do. What happens if we don't? If we don't, and if indeed this nation's medical care system does have imposed upon it controls of an arbitrary, simplistic nature, we will begin to see rationing of the quality and the quantity of medical care in this country. There's no other solution. That's the simple overall answer to what can happen. It's exactly what has happened in Great Britain with a national health service. You cut down on the availability of doctors and just what I described a minute ago will occur. Our hospital administrators have no other choice. And you and I have no other choice. This isn't acceptable to you and me nor to the people

of this country.

Many of you know I have had two opportunities during the last five months to spend about five weeks in the Soviet Union, first in March and again in July. In July I spent the time primarily in Soviet Siberia, 300 miles north of outer Mongolia. It has a 2.5 million population city, Novosibirsk, and nearby their science city of Academ Gorodok where their 22 institutes of science research are located. On our return from the first trip, our group was asked to stop by the World Health Organization. The director-general, Dr. Halfden Mahler, wished to talk with us about half a dozen issues the World Health Organization was considering. After an hour and a half with him, we were about to conclude when he turned to me and said, "Dr. Nesbitt, I have one message that I would like for you to take back to the physicians of your great nation. The world looks to the medical profession of the United States because of the quality of medical care." He stopped, and then he said, "No, let me phrase it another way, because they don't just look at the quality. They look to the American doctor because of the *sterling* quality. The sterling quality that exists in the United States today is unparalleled in the world, and the rest of the world looks to you to retain it and to continue to preserve it. That's your obligation to this profession."

I was deeply touched by those words. I've never forgotten that term—the "sterling quality"—because it's so true. And we *do* have an obligation to preserve that "sterling quality." Our professionalism is being threatened today as never before—our professionalism as we think of it in

Most physicians think that when you use the term "national health insurance" you are automatically referring to socialized medicine. We are not saying that.

the context of quantity and quality of care and in terms of medical education. What are those threats to our professionalism and medical education? Let me enumerate just a few of them.

The first is in the activities of the Federal Trade Commission right now. They have been challenging the authority of the joint AMA-AAMC Liaison Committee on medical education that accredits all our medical schools—our joint responsibility for more than 35 years. We cover

the costs one year and the AAMC underwrites them the next year. We have the responsibility for accrediting all 116 medical schools in this country and the 16 in Canada. And the FTC has challenged the authority of the LCME to conduct this activity because, they said, it is a conflict of interest. It is a conflict, they said, for physicians to accredit a medical school, because we can't do it from an objective standpoint. The more constraints we put on the output of physicians,

92% of the people in this country already have a health insurance policy 8% do not. Most of that 8% are the unemployed of this country. We need to find a mechanism for the unemployed to also have access to a health insurance policy.

the less competition we have. Can you imagine? They could never validate this. There are no facts to corroborate this in any way. In fact, the facts are to the contrary, because in the last decade, as I mentioned, we have seen wide expansion in medical education and in the output of physicians.

Nonetheless, the Office of Education reviewed the FTC 15-page documented complaints very seriously. The FTC objected to our having this authority. They wanted to get physicians out of the process of accrediting medical schools and give accreditation responsibility to consumers. The Office of Education did renew the LCME's charge for two years, but with the proviso that it's up for review in one year. In one year we have to show that we've eliminated any conflicts of interest, so that threat still hangs over our head.

What are some of the other threats? One big one is the National Advisory Commission on Graduate Medical Education. When the Carter administration took over, they reviewed all the advisory councils of government and particularly those to HEW, several of which had just been appointed during the preceding year. They abolished all but two of them—the National Advisory Council on the National Health Planning Law and the National Advisory Council on Graduate Medical Education. I happen to serve on that council as one of the representatives of organized medicine. That council is charged with the responsibility, during the next 18 months, of reviewing the geographic distribution of physicians,

the specialty distribution of physicians, how one specialty relates to another in size, and the perceived needs of the community. When and if deficiencies of maldistribution are identified as actually existing, we are to provide the secretary of HEW with our recommendations as to how he can institute legislation to alter distribution so that it will be more favorable. That's a grave threat to our professionalism and to the medical education of our nation's students.

In addition to that, 13 of the 26 American boards have also been challenged by the FTC to provide a series of documents, some 40-odd each, as to their structure, their function, and the selection of their officers—again looking for elements of conflict of interest. This one is dormant because at the moment they're busily engaging the AMA in court before an administrative law judge, who is a full-time employee of the FTC, and who's hearing the case accusing the AMA, the Connecticut Medical Society, and the New Haven Medical Society of being in restraint of trade because of our proscriptions about advertising by physicians—our ethical constraints. I hope you realize we really don't have any proscriptions against advertising per se. We do, as physicians, have ethical proscriptions relative to the fraudulent and deceptive solicitation of patients. You and I advertise every day. We advertise in the Yellow Pages of the phone book and in many other ways. As long as it's done in an ethical manner, it's perfectly acceptable. Now we're in court, spending approximately \$60,000 of your dues money every month, defending our ethical capability to do this.

notice that I don't use the term "national health insurance," because I try to avoid the term. It's such an emotionally misunderstood term in the eyes of physicians and the public. Most physicians think that when you use the term "national health insurance" you are automatically referring to socialized medicine. We are not saying that. The physicians of this country who have spoken through the House of Delegates of the AMA have made a decision over a two-year period, considering every possible aspect of it, and have said, "Yes, we do reach the consensus opinion that every citizen in this nation should have a health insurance policy to help defray the cost of a medical illness." I find few physicians who really disagree with that concept. If we firmly believe that we can make it possible for every citizen to have a health insurance policy to help defray the cost of a medical illness, that, to me, makes sense. That's the system we have today, with 92% of the people of this country already having a health insurance policy, according to that description. Eight percent do not. Most of that 8% are the unemployed of this country. We need to find a mechanism for the unemployed to also have access to a health insurance policy.

What we're saying, also, is that we want minimum federal government involvement. We want to use the private insurance industry on which our current system of insurance is based. We want nothing to do with Social Security financing. We want nothing to do with government or Social Security administration of such a system. We do want to put in place some elements of cost control which have been done through

I really have been appalled at the lack of understanding on the part of most physicians of the scope and magnitude of activities of this organization of yours—the American Medical Association It's primarily scientific, educational, and informational.

These are some of the current dangers in medical education. The Liaison Committee on Graduate Medical Education (LCGME), the body now composing all of our residency review committees, is also now being looked at by the FTC. I firmly believe that all this effort by the health planners, the social scientists, the economists and the government is leading up to one thing—the imposition upon this nation of a system of national health service.

When I say "national health service," you

elements of co-insurance. That's a separate issue. That issue is already being addressed separately. So what we're saying is that the only manner in which we can get the 15 positions of the AMA that the doctors of this country have agreed upon before the Congress of this nation—when and if they ever get around to talking about national health insurance or national health service or comprehensive health insurance or whatever you want to call it—the only way we can get our solution is to put it in legislative language that

the Congress considers will embody these concepts that we've identified. That's what was done by the House of Delegates of the AMA in the last three sessions. There's been no unanimity of opinion, as you can well understand. But there has been a sense of unity in the direction toward these objectives that I've just outlined. The AMA has never once said we believe we should have a system of national health service. We have always said that it should be kept within the context of minimum federal involvement. We base it on the context of the health insurance industry that we now have in operation in this country, because it's a good system, and it can work. That's what we're saying about national health insurance.

I can't conclude without mentioning just a couple of things about the American Medical Association, because I've been really impressed—I guess "appalled" is a better word—in the last two or three years, as I have had the opportunity to meet with medical groups. I guess I really have been appalled at the lack of understanding on the part of most physicians of the scope and magnitude of activities of this organization of yours—the American Medical Association. Doctors don't really understand that it's primarily a scientific, an educational, and an informational organization.

It's a corporation with an annual budget in excess of \$60 million with more than 900 employees in Chicago and Washington, employing people from physicians and lawyers to planners and economists, and has more than 2,000 affiliate state and county medical societies. In my view, the way you assess the value of an organization is how it spends its budget dollars. If we take the AMA budget and analyze it, we'll find that better than 98% of the dollars that are expended on an annual basis go for activities that are scientific, educational, and informational. They are directed toward the original objectives of the AMA, which are to promote the art and the science of medicine and the betterment of the health of the American people. We spend more than \$17 million on scientific publications alone. We spend another \$12 million on medical education, because we do all the staff work every other year for the accreditation of our medical schools. We have always done all the staff work and appointed half of all the bipartite residency review committees, one third of all the tripartite. We accredit all the residency programs through the LCGME, which, as mentioned, has taken over

Residency Review Committee functions.

Our dues dollars pay for all the staffing activities. That's where the costs are. We still ap-

Those of us who don't belong are getting a free ride. Those are the freeloaders who've been receiving the benefits of the AMA all these years and don't participate.

point one half of all those committees. They're responsible for reporting to those of us who sit on the Board of Trustees. We've also been responsible for the accreditation activities of all 7,000 programs of continuing medical education in this country. We pay for all the staff work through our dues dollars. Those of us who don't belong are getting a free ride. Those are the freeloaders who've been receiving the benefits of the AMA all these years and don't participate. I hope none of you fall into that category of freeloaders. I hope all of you do belong and understand the responsibility to support the medical education activities.

We also support the activities of the Joint Commission on Accreditation of Hospitals, providing seven of the 20 JCAH representatives. Three are from the American College of Surgeons, three from the American College of Physicians, seven from the AHA and seven from the AMA, five of whom are currently members of the AMA Board of Trustees. In a few years, most will be from the Board of Trustees because that's where we get our best input into the decision-making that goes on in the Joint Commission. They just have a new director, Dr. John Affeldt, and we all feel Dr. Affeldt is going to do a great job. We are in a stronger position today in American medicine in the Joint Commission than we've ever been.

Our dues dollars also support such public programs as the one against TV violence and the effort to improve the health care in the jails of this country and most recently, the immunization project. We have 20 million children in this country who are not immunized. The AMA Auxiliary, under the support of the AMA, is beginning to initiate one of the most extensive immunization programs this country has ever known. You'll be seeing some stencils on the playground yards in your area which will show a hopscotch with one of the diseases that can be prevented by immunization lettered in every square. Be-

cause the message hasn't gotten home to the parents about the necessity for immunization, we are going to take it to the playground—take it to the children of this nation and get them immunized.

Where do you think the loan programs for medical students come from? Seventy-seven million dollars in medical student loans are guaranteed by the AMA through the Education and Research Foundation. We've given more than \$25 million in direct cash benefits to the deans of our medical schools—unencumbered monies to do with as they feel appropriate on behalf

"For every human problem there is a solution that is simple and neat and wrong."

of their students. We've recently initiated a new medical school deans' avenue of input into the House of Delegates. Last summer when they were organized in San Francisco I had a number of deans tell me that the most valuable source of money they ever had access to through the years has been the money AMA gave them, unencumbered, no strings attached, to use as they saw fit for the benefit of specific situations among their student body.

The AMA does many good things and we don't get credit for most of them. We also represent you in Washington. Our people look over all 28,000 to 30,000 bills introduced into every session of Congress. About 10% of those relate to the profession of medicine. We have to review the *Federal Register*. Every year the *Federal Register* with the *Congressional Record* amounts to a stack of paper (97,000 pages last year) 16 feet tall. Where are you going to find someone who will conduct this activity for the profession if you don't use AMA? I guarantee you the American College of Physicians can't do it, with their 32,000 members, nor the American College of Surgeons, with their 36,000 members, nor the American Academy of Family Practice with their 42,000 members. No other organization in medicine in this country has the responsibility to conduct all the activities of the profession of medicine that the AMA has, has had in the past, and continues to perform every day on behalf of each and every one of us.

It's true that some of us are put in positions of leadership and we have to deal with the

controversial issues. Many times there is no unanimity of opinion on what should be our position. The important thing is that we can at least arrive at a consensus and that we can be unified in the way we approach some of these problems on behalf of this profession, because in my view the next five years will be the most critical this profession has ever known, due to just the issues that I've outlined to you here. We have a great obligation to preserve this profession in a better fashion than the way we found it for those future generations of doctors.

Let me close by reminding you of a little saying which is attributed to H. L. Mencken. He is supposed to have observed one time that for every human problem there is a solution that is simple and neat and wrong.

I think our responsibility is to let the public, our patients, the people whom we serve—and we are a service industry—the opinion leaders, and the decision-makers in this country know that simple, neat solutions can be extremely tempting, but most of the time they really are dead wrong. It's important that we oppose the simplistic solutions.

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Human Breast Cancer and Estrogen Receptors

F. ANTHONY GRECO, M.D., Editor

Patient Presentations

Patient 1 is a 33-year-old woman who presented to her physician with a breast mass in 1975. She had a modified radical mastectomy and did well until 1977 when bilateral large supraclavicular nodes and a pleural effusion developed. Thoracentesis revealed malignant cells and a node biopsy metastatic breast cancer. Estrogen receptor assay done on tumor tissue was positive. She was treated with oophorectomy.

Patient 2 is a 35-year-old woman who had a radical mastectomy in 1976. In 1977 she developed chest pain and back pain. A pleural effusion, lytic bone lesions of the lumbar spine, and axillary nodes were detected. Biopsy of an axillary node showed metastatic breast cancer. Estrogen receptor assay done on tumor tissue was negative. She was treated with cyclic combination chemotherapy with cyclophosphamide, methotrexate, and 5-fluorouracil.

Why were these two patients with similar clinical histories and findings treated differently? The answer is found in understanding the significance of the estrogen receptor assays which were performed on the tumors in both of these patients. Dr. Ronald Richardson of the Division of Medical Oncology at Vanderbilt and Saint Thomas Hospital will continue the discussion.

RONALD L. RICHARDSON, M.D.:

In the past ten years we have witnessed advances in our understanding of the biology and therapy of breast cancer. Fisher and associates¹ of the National Surgical Adjuvant Breast Project, and Bonadonna and associates² demonstrated the prognostic importance of axillary node status at the time of mastectomy and the value of adjuvant chemotherapy in preventing relapse and prolonging survival in certain groups of patients. At the same time numerous investigators exploring the hormonal and biochemical factors involved in the growth and regression of mammary carcinomas showed the significance of measurements of tumor cell estrogen receptor proteins in predicting clinical response to endocrine ma-

nipulation. This discussion will review certain aspects of our understanding of estrogen receptors and the clinical applications of estrogen receptor assays.

Historical Perspectives

Endocrine therapy of breast cancer was first suggested in 1896 by Sir George Beatson who reported remission after bilateral oophorectomy in two women with advanced breast cancer.³ Although Beatson's report was largely ignored, interest in hormonal therapy of patients with advanced malignant disease was rekindled with Huggins' application of orchiectomy to induce remission in men with carcinoma of the prostate,⁴ and within two decades hormonal manipulation, either ablative⁵ or additive,⁶ became standard therapy for recurrent or metastatic breast cancer.

It became apparent that approximately one third of all women with recurrent or metastatic disease responded to hormonal manipulation, but the biochemical basis for this observation was elusive. Furthermore, since two thirds of such patients did not respond to additive or ablative therapy, proper patient selection was imperative in order to spare these patients a trial of therapy or a surgical procedure with little prospect for success.

Within the past ten years a biochemical property of certain breast tumors, the capacity to take up and retain estradiol-17 β , was identified as a characteristic useful in predicting a patient's response to endocrine therapy. This was first observed by Folca and associates⁷ who noted that following injection of H³-hexestrol into women with breast cancer, estrogen uptake was greater in tumors of four women who later responded to ablative surgery than in tumors of six patients who did not respond to surgical ablation.

Mechanism of Action of Steroid Hormones

Much of our knowledge of the effects of steroid hormones on tumor cells has been derived from observations of the action of estrogens on normal target cells such as those in the uterus, vagina, anterior pituitary, or mammary gland. The binding of estradiol-17 β to high-affinity estrogen binding proteins or estrogen receptors initiates a sequence of events culminating in a target cell response such as the synthesis of a protein, as shown in Figure 1. In the uptake step, the steroid hormone enters the cell by passive diffusion and binds with a cytoplasmic receptor protein. This receptor protein found in the cytosol in cell homogenates is apparently not associated with mitochondrial or endoplasmic reticulum membranes, but may be loosely bound to the inner surface of the cytoplasmic membrane. After combining with estradiol-17 β , the receptor undergoes a transformation to a new species which then migrates or translocates to the nucleus where it binds to sites presumably on target cell DNA. The nuclear form of the estradiol-receptor complex interacts with nuclear chromatin to stimulate RNA polymerase activity, resulting in an increase in protein synthesis. Once the hormone-receptor complex has initiated a response by the target cell, its fate and departure from the nucleus are unknown.

Normal mammary epithelial cells contain cytoplasmic or membrane receptors for each of the hormones known to influence the growth or

function of the mammary gland, as shown in Figure 2. These receptors, which function to trigger the biochemical sequences of events characteristic of each hormone, are probably not independent of influences of the other hormones, and *in vitro* estrogen and progesterone appear to exert feedback control on each other at the tissue level: estradiol enhances tissue sensitivity to progesterone in correlation with increased progesterone receptor levels, and progesterone may modify cytoplasmic estrogen receptors and alter the cell's ability to respond to estradiol.⁸ When combined with moderate doses of estrogen, progesterone can cause murine mammary tumor regression,⁹ and in humans the percentage of breast tumor regressions in response to a progesterone-estrogen combination is usually higher than with progesterone alone.¹⁰ Whether the addition of progesterone to estrogen confers increased therapeutic benefit is not known with certainty, but some patients whose tumors have failed to respond to high-dose estrogen alone have responded to estrogen-progesterone combinations.^{11,12}

Clinical Application

The percentage of breast cancer patients having primary tumors with positive estrogen receptor assays is not known. In the largest series reported to date, 326 of 421 primary tumors, or 77%, were estrogen receptor-positive,⁸ although other investigators have reported smaller

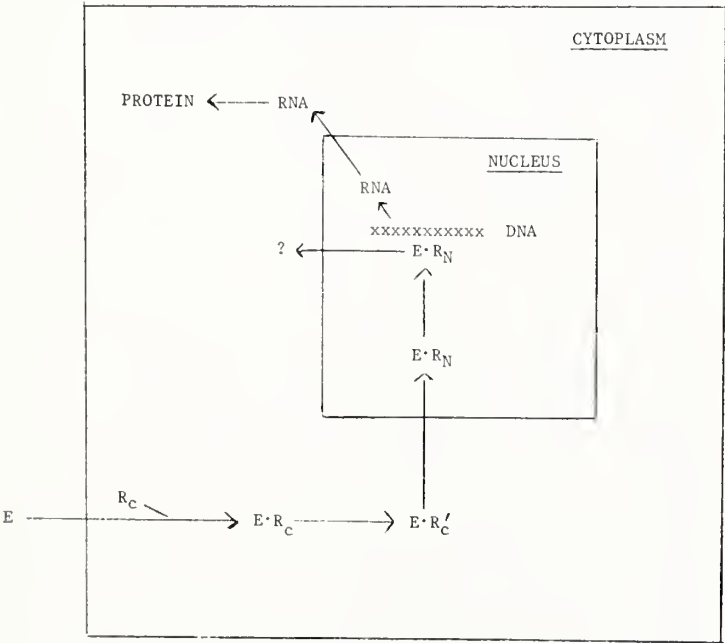


Figure 1. Postulated mechanisms of action of estradiol 17- β on target cell. (E=estrogen, R_c=cytoplasmic receptor, E·R_c=estrogen-receptor complex, E·R'_c=activated complex, E·RN=nuclear species of estrogen-receptor complex). (After Witliff.¹⁹)

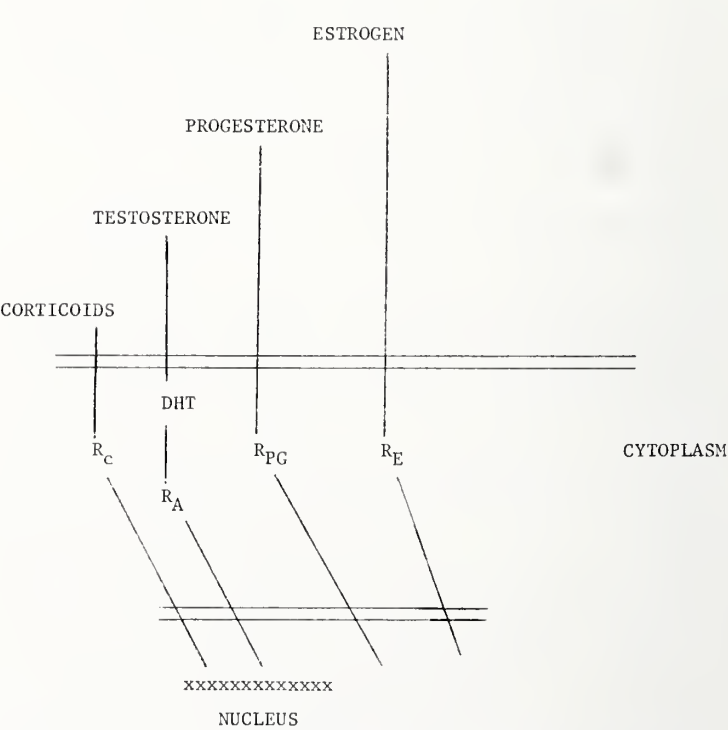


Figure 2. Hormonal influences on mammary tissues. (After McGuire.¹³)

series with considerably lower figures in the 45%-50% range.^{14,15}

These differences may be due in part to differences in assay technique and in patient referral patterns. Most investigators agree that tumors from premenopausal women have lower estrogen receptor values than from postmenopausal women, presumably due to endogenous estrogens occupying receptor sites and making them unavailable to radioactive-labeled estrogen, but this does not explain the lower percentage of estrogen receptor-positive tumors found in pre- and postmenopausal women in comparison to postmenopausal women.^{14,16} Conflicting data^{13,17} do not allow definitive statements to be made regarding the relationship between estrogen receptor status and tumor histology, size, or axillary node status. A high percentage of metastases may be estrogen receptor-positive,⁸ but receptor status may change during the course of the disease.^{16,18}

Analysis of data involving 436 treatment trials in 380 patients by the Treatment Committee of the Breast Cancer Task Force in 1974 showed the value of estrogen receptors in predicting response to hormonal therapy.¹³ As shown in Table 1, if a patient has a tumor with a positive estrogen receptor value, the chances of obtaining tumor regression with hormonal manipulation are roughly 55%. However, if the estrogen receptor value is negative, the prospect for response to this therapy is dismal (10%), and, therefore, it seems that many patients can be spared major ablative surgery or trials of hormones if estrogen receptor assays are performed routinely. This information explains why patients 1 and 2 presented initially by Dr. Greco were treated differently. The estrogen receptor assay in patient 1 was positive and since she was premenopausal

oophorectomy was indicated. In patient 2 with a negative estrogen receptor value oophorectomy would offer only a small chance of response and she was treated initially with chemotherapy. Since receptor status may change with progression of disease, it would seem prudent to biopsy accessible tumor for receptor assay whenever a change in therapy is contemplated.

What of the 45% of patients with positive estrogen receptors who do not respond to hormonal manipulation? Can we determine more accurately the variables involved in predicting a response and thereby save this group from unrewarding surgery or therapeutic trials? Because of the interdependence of several hormones in the regulation of normal mammary cells (Fig. 2), it is possible that some of these patients with positive receptors who fail to respond to hormonal therapy have biochemical lesions involving other receptors, thus rendering these neoplastic cells independent of hormonal control. Correlations of estrogen and progesterone receptor assays and responses to therapy support this concept, as shown in Table 2.¹³ Patients with tumor negative for both receptors did not respond to endocrine manipulation, and patients who had tumors with positive estrogen and negative progesterone receptors had lower response rates than patients with tumors positive for both receptors. Although the number of patients in this study is small and needs to be expanded, these data suggest that assays for estrogen, progesterone and perhaps other hormone receptors may provide both greater accuracy in selection of patients for ablative or additive endocrine therapy and a rational basis for the use of other hormones in addition to estrogens, antiestrogens, and androgens.

The implications of these studies are clear, and the value of estrogen receptor assays in treatment planning is established. These assays are available from a number of commercial laboratories at reasonable cost and require

TABLE 1
BREAST TUMOR REGRESSION ACCORDING TO
ER ASSAY AND TYPE OF THERAPY

Therapy	ER+	ER—	ER (borderline)
Ablative therapy (castration, adrenalectomy, hypophysectomy)	59/107=55%	8/94=8%	3/10=30%
Additive therapy (estrogen, androgen, glucocorticoid)	51/85=60%	7/82=8%	0/3=0%
Antiestrogens and other	10/23=43%	5/32=16%

After McGuire¹³

TABLE 2
RECEPTOR DISTRIBUTION AND RESPONSE TO
HORMONAL MANIPULATION

Receptors	Response
ER— PR—	0/11=0%
ER+ PR—	7/18=30%
ER+ PR+	16/25=64%

After McGuire¹³

nothing more in the way of special handling for specimens than prompt freezing of the fresh specimen and shipment in dry ice. Like the careful determination of axillary node status, assay of estrogen receptors should be part of the evaluation of the patient with breast cancer.

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E. PAUL NANCE and A. JAMES GERLOCK, JR., M.D.

A 35-year-old male presented to the emergency room with gross hematemesis. A nasogastric tube was placed into the stomach and gross red blood was aspirated. The vital signs were stable and emergency arteriography was performed. A single film from the arteriography shows an abnormality (Fig. 1). What is your diagnosis?

- (1) Bleeding esophageal varices
- (2) Mallory-Weiss tear
- (3) Acute hemorrhagic gastritis
- (4) Bleeding duodenal ulcer

Discussion

Although the etiology of upper gastrointestinal bleeding can be found by barium studies in 50% to 80% of cases, arteriography may be helpful in those cases where barium studies are contraindicated or nondiagnostic.¹ For example, a patient with demonstrable esophageal varices may be bleeding from a Mallory-Weiss tear or a duodenal ulcer. In some cases, arteriography can demonstrate bleeding of as little as 0.5 ml/min.²

Arteriography for upper gastrointestinal bleeding should not be performed until the patient is stable and any marked blood loss has been replaced. In most cases, endoscopy will have been performed and the general area of bleeding may have been located. This localization will aid in selecting the appropriate angiographic study.

Esophageal varices are seen as tortuous dilated veins in the venous phase of a celiac axis injection. Slow venous flow in portal hypertension leads to dilution of the contrast with non-opacified blood and the varices are frequently only faintly seen. Likewise, extravasation of contrast medium from bleeding varices may be difficult to detect.

Bleeding from a Mallory-Weiss tear is more easily demonstrated. It appears as puddling of

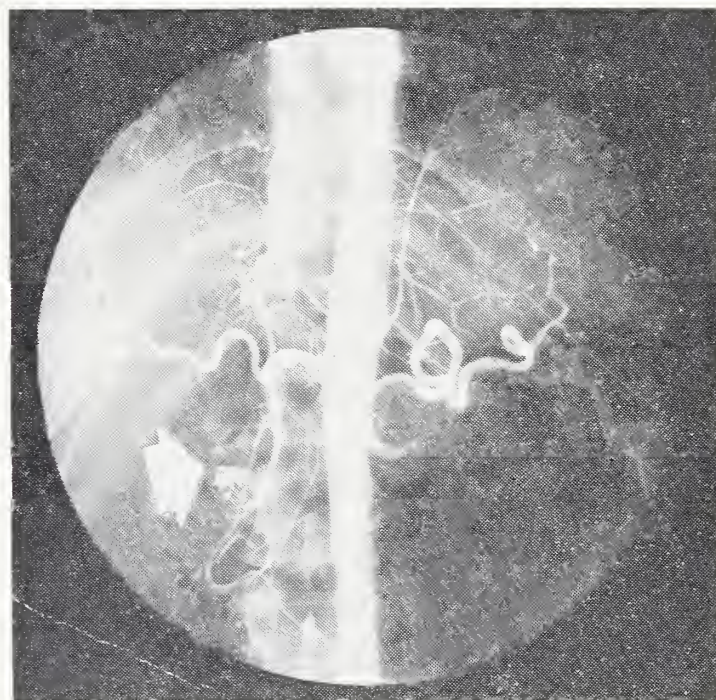


Figure 1. Selected radiograph from late arterial phase of celiac arteriogram showing puddling of contrast in lumen of duodenum (arrow).

contrast in the region of the cardio-esophageal junction in the late arterial or parenchymal phase of a celiac or selective left gastric artery injection.

In hemorrhagic gastritis, a focal area of bleeding is not usually seen. Instead there is generalized mucosal hypervascularity and diffuse accumulation of contrast medium in the stomach.

A bleeding duodenal ulcer is usually seen on celiac or selective gastroduodenal arteriography as a focal puddling of contrast medium in the distribution of one of the superior pancreaticoduodenal arteries, which was the finding in this case.

Answer: Bleeding duodenal ulcer.



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From the Department of Radiology, Vanderbilt University Hospital, Nashville, TN 37232.

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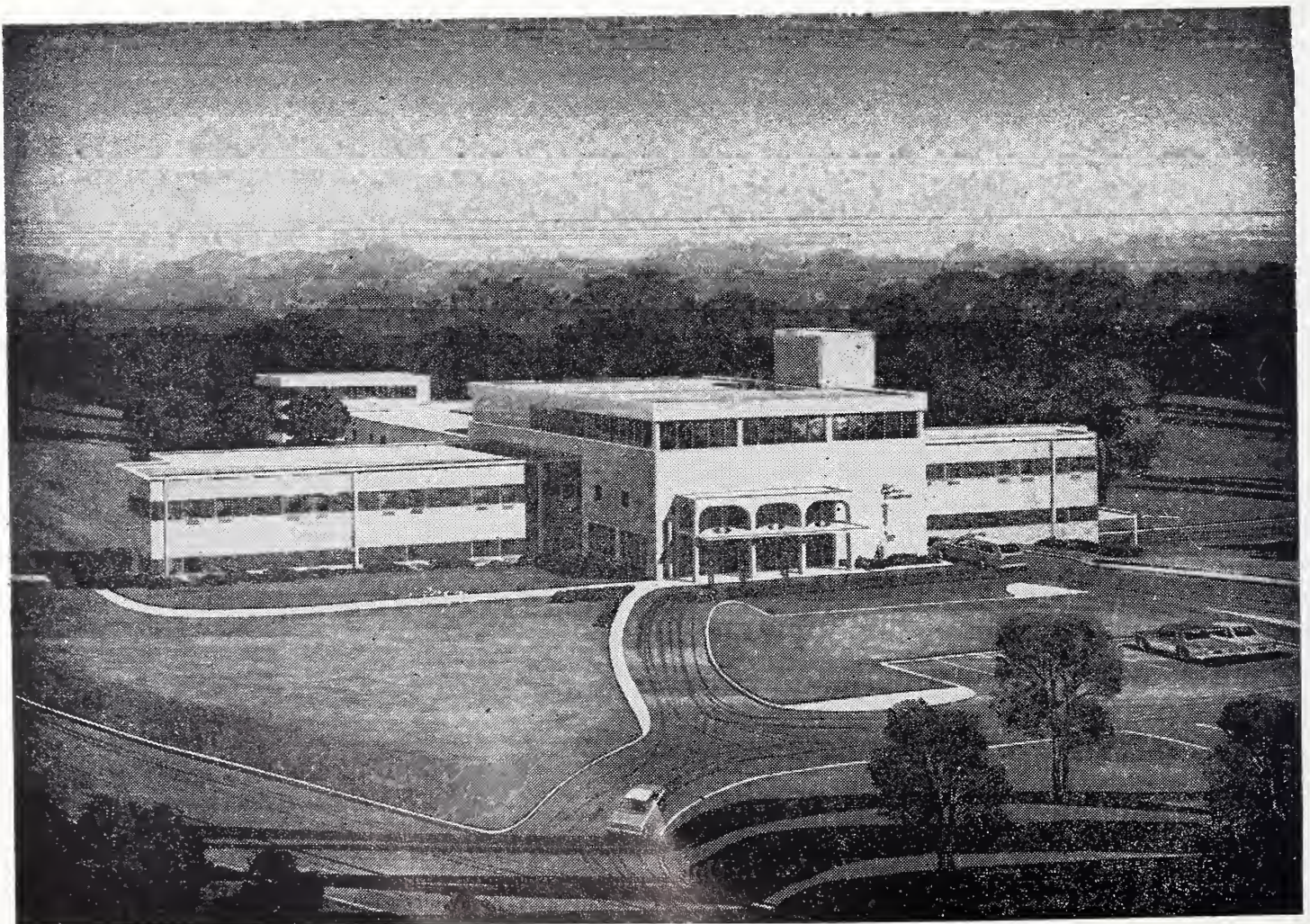
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Distinguishing Primary Aldosteronism Caused by Adenoma from Adrenal Hyperplasia

JOHN W. HOLLIFIELD, M.D.

Primary aldosteronism is an uncommon cause of secondary hypertension accounting for less than 1% of all hypertensive conditions. Recognition of this disorder has posed a considerable diagnostic problem in the past as formal sodium balance studies measuring urinary aldosterone under well-controlled conditions were required to confirm its presence. Recently we have reported the use of an acute diagnostic procedure, the saline suppression test, which makes possible the outpatient recognition of primary aldosteronism.¹ Thus for the first time establishing the diagnosis of primary aldosteronism is within the scope of any practicing physician. However, merely establishing the diagnosis of primary aldosteronism is not sufficient to guide the management of the patient, because management depends upon the type of disease present.

There are two major histologic variants of primary aldosteronism: the aldosterone producing adenoma (APA) and micronodular hyperplasia (MNH). APA is generally considered a condition which responds favorably to operative management, with a relatively high percentage of patients with the disorder becoming normotensive after removal of their adenoma. On the other hand, MNH is a condition which rarely responds favorably to operative management, requiring chronic medical therapy for long-term successful blood pressure control. Thus it becomes important to distinguish between MNH and APA, because the approach to therapy in the two conditions is so different. Currently there are five techniques which help to distinguish these two conditions and make possible a more scientific basis for therapy (Table 1).

From the Hypertension Center, Vanderbilt University Hospital, Nashville, TN 37232.

TABLE 1

METHODS OF DISTINGUISHING APA FROM MNH

Measurement of diurnal rhythm in plasma aldosterone
Adrenal scans with 19-iodocholesterol and 6- β -methyl-norcholesterol
Adrenal vein aldosterone sampling
Adrenal venography
Adrenal sensitivity testing using ACTH and angiotensin II

The physiological diurnal variation in plasma levels of cortisol and aldosterone is well known. Several investigators have called attention to the presence of this phenomenon in APA and its absence in MNH and have demonstrated its usefulness in distinguishing the two conditions. Testing for this phenomenon is accomplished by measuring plasma aldosterone with the patient resting supine at 7 AM. The patient then assumes the upright posture for the next six hours and blood for aldosterone is drawn at 10 AM and 1 PM.

Three patterns of plasma aldosterone may be seen. In patients with essential or renovascular hypertension the 10 AM upright aldosterone is higher than the 7 AM supine value and the 1 PM value is approximately equal to the 10 AM value. In APA the 7 AM determination is higher than at the value at 10 AM which is higher than the value at 1 PM. In MNH there is no significant difference in the 7 AM, 10 AM or 1 PM plasma aldosterone values.

Although adrenal scanning agents are not currently marketed, 19-iodocholesterol is under development as an effective scanning agent and should soon be available for clinical use. Both 19-iodocholesterol and 6- β -methylnorcholesterol

Continued on page 49

W. BARTON CAMPBELL, M.D.

A 71-year-old woman was seen for increasing exertional dyspnea and orthopnea. She recently had a pacemaker implanted following syncopal episodes. A recent cardiac catheterization showed normal coronary arteries and a dilated left ventricle with markedly impaired contractility. The following electrocardiogram and rhythm strip (strips are continuous) were obtained (Figs. 1 and 2).

R-to-spike interval is very constant at 0.56 seconds. Analysis of the accompanying rhythm strip (Fig. 2) discloses why this is so. Occasional ventricular capture is noted in the rhythm strip. Each ventricular capture is preceded at 0.24 seconds by a pacemaker spike that does not

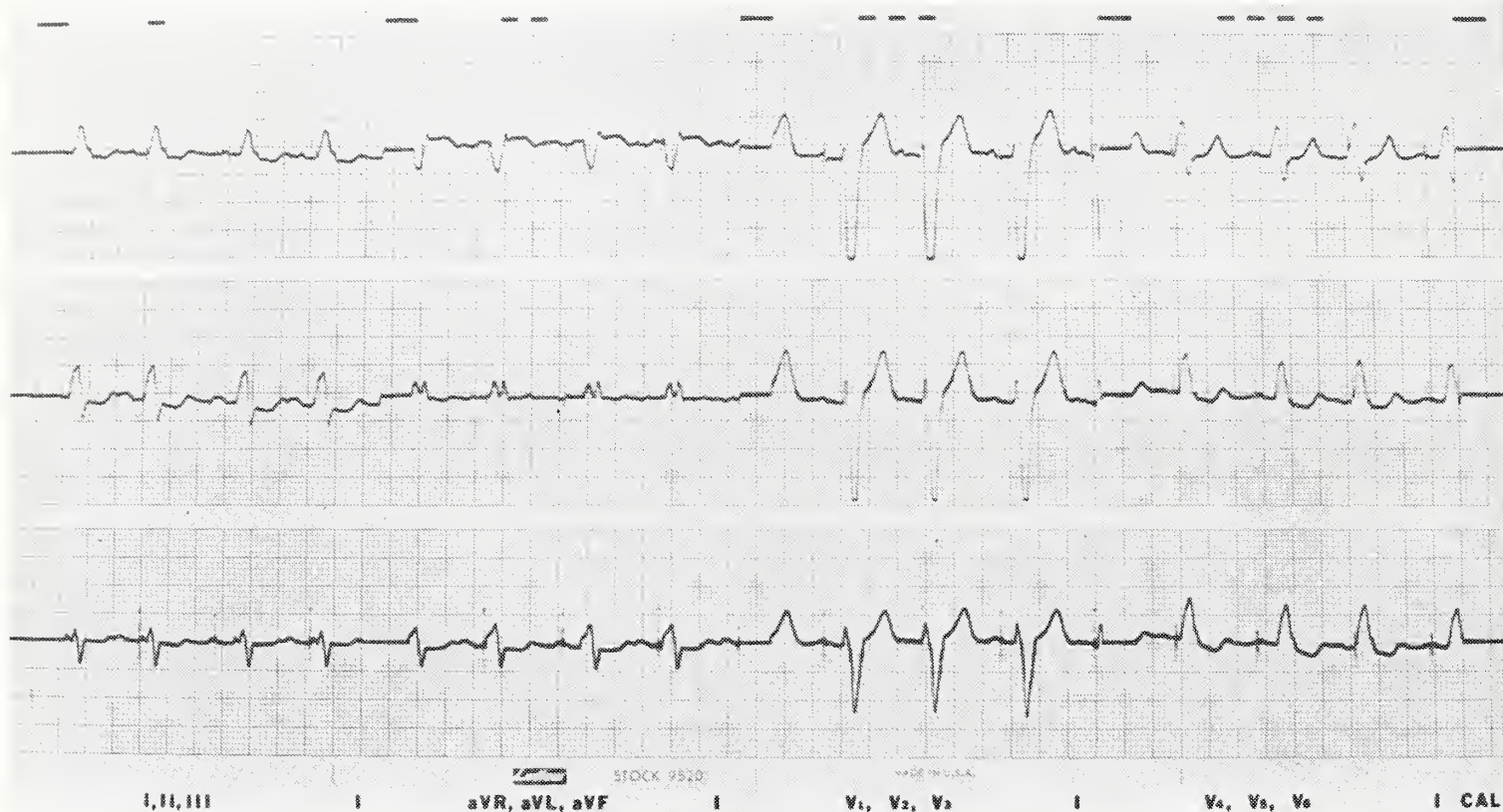


Figure 1

Discussion

The electrocardiogram discloses a sinus mechanism at a rate of approximately 90 per minute. There is notable sinus arrhythmia. The R-R intervals vary from 0.54 to 0.70 seconds. The PR interval is borderline prolonged at 0.20 seconds. The QRS is widened with a duration of 0.15 seconds and shows the characteristic leftward posterior forces of left bundle branch block. The ST-T changes are in this case secondary to abnormal depolarization. A pacemaker spike is noted throughout the tracing and does not appear to result in myocardial capture. Note that the spike-to-spike interval varies but the

From the Department of Cardiology, St. Thomas Hospital, Nashville, TN 37202.

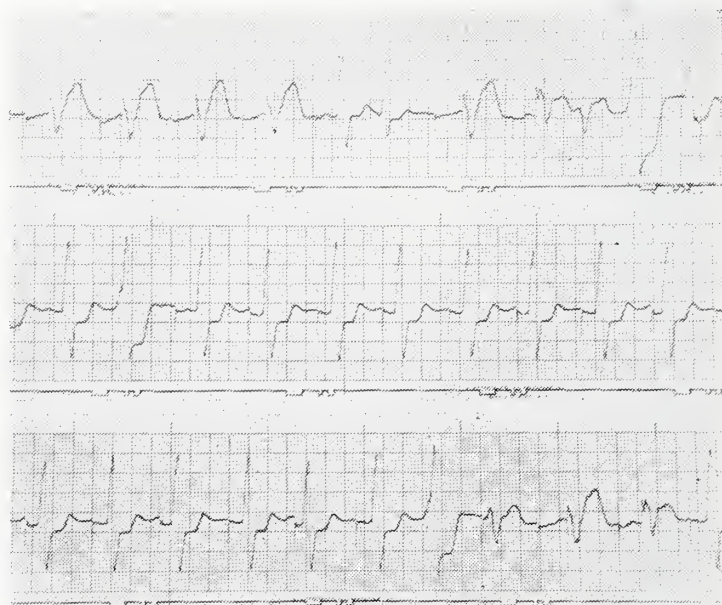


Figure 2

capture. (Note that P waves occur independently at this pacemaker spike. This is diagnostic of a sequential atrial-ventricular pacemaker. The atrial pacemaker is failing to capture the atria. The occurrence of the patient's nonpaced R waves inhibits ventricular depolarization (an R-inhibited demand pacemaker). The next atrial spike occurs at precisely 0.56 seconds following ventricular depolarization. Figure 3 displays atrial pacemaker spike (A), paced ventricular beats (P), and normal sinus node atrial depolarization (S). The QRS complexes which are not paced follow these sinus beats with a left bundle branch block configuration. (The rhythm strip is from modified lead II.) An occasional fusion beat (combination complex) is present.

Further history disclosed recent implantation of an American AV sequential pacemaker of the 8100 series. This sequential pacemaker was implanted in the hope that atrial depolarization would improve cardiac output in this patient with a markedly impaired left ventricle.

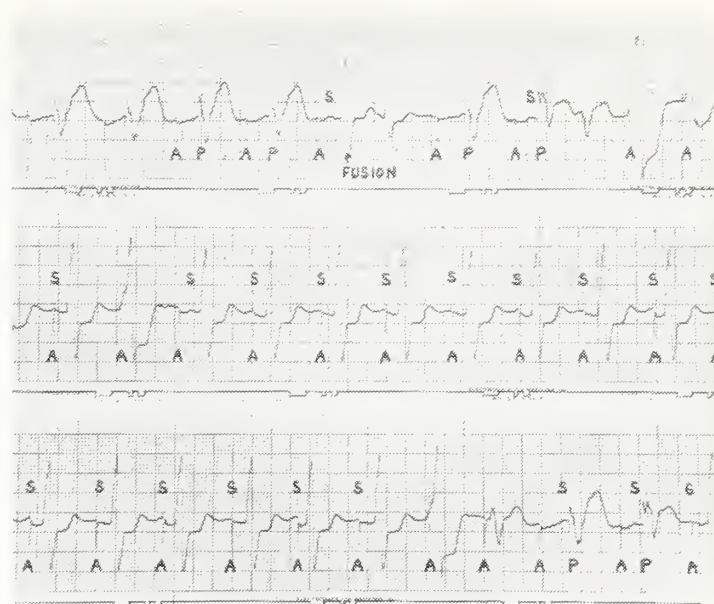


Figure 3

Final diagnosis: (1) Left bundle branch block. (2) Sequential atrial pacemaker with failure of atrial capture and normally functioning R-inhibited demand ventricular pacemaker.

Hypertension Reviews . . .

Continued from page 47

give satisfactory adrenal images seven to ten days following injection of the radioisotope. Their usefulness in separation of APA from MNH is limited however, because the adenoma is often too small for the resolution of conventional scanning equipment and the uptake of adrenal radioactivity is not suppressed in the adrenal contralateral to the tumor.

Adrenal vein aldosterone sampling has been suggested as an effective method for recognizing APA. Plasma aldosterone (A) and cortisol (C) are determined on adrenal venous effluents and the ratio of A/C compared with the ratio of a peripheral vein or IVC. A ratio from the adrenal vein which is greater than twice the contralateral A/C ratio is strongly suggestive of an adrenal adenoma. Retrograde injection of radio-opaque dye into the adrenal vein may also localize an adrenal tumor, although this technique may be complicated by adrenal infarction.

In primary aldosteronism the sensitivity of the adrenal gland to trophic stimulation with either

ACTH or angiotensin II may be altered. Patients with MNH have enhanced sensitivity to subpressor doses of angiotensin II when compared with normal individuals or patients with essential hypertension and are far more insensitive to the stimulation of aldosterone production by ACTH than normals. On the other hand patients with APA respond to far smaller doses of ACTH with aldosterone production than do normals or MNH patients, yet require 100 or 1,000 times greater dose of angiotensin II to effect a stimulation of aldosterone than patients with MNH.

Using these five techniques, the management of primary aldosteronism can be facilitated by separating those patients in whom operative therapy is appropriate (APA) from those whose treatment of choice is chronic medical management (MNH).

REFERENCE

1. Eskin, J, Frazer, M, Latta, D, et al: Screening recognition of primary aldosteronism. *J Tenn Med Assoc* 70:652-653, 1977.

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Superior Vena Cava Syndrome

ROBERT L. BELL, M.D.

For six months, this 53-year-old white woman had draining skin lesions over her chest, swelling of her arms, face and neck, and a chronic cough. Hemoptysis and right pleuritic chest pain for one week led to her hospitalization. She had an adenocarcinoma of the right upper lobe of the lung removed three years before, for which she received radiation therapy. On admission her neck veins were distended, there was swelling of the face, neck, arms, jugular veins, and head and upper chest. There was a questionable friction rub over the right chest. Chest x-rays showed cavitation of the right upper lung and an enlarged heart. Nuclear medicine studies (Figs. 1 and 2) showed obstruction of the superior vena cava and pericardial effusion.

The skin lesions revealed nocardia organisms which were sensitive to sulfa drugs. Two pericardial taps from the subxyphoid approach led to the removal of 500 cc of fluid and revealed no organisms or malignant cells. The pericardial tap on both occasions did alleviate some of the patient's symptoms.

It is difficult to assess the cause of superior vena cava syndrome. The prior thoracic surgery, carcinoma of the lung, and radiation therapy are all known causes of both pericardial effusion and superior vena cava syndrome. Although superior vena cava syndrome occurring after a lung cancer has been discovered usually carries a grave prognosis, in this case the patient's excellent response to therapy for nocardia and the absence of demonstrated metastases may favorably alter the prognosis. The documentation of these conditions by nuclear medicine techniques is an example of a simple noninvasive test that can arrive at the diagnosis in less than five minutes and can influence therapy.

From the Department of Nuclear Medicine and Ultrasound. Park View Hospital, Nashville, TN 37203.

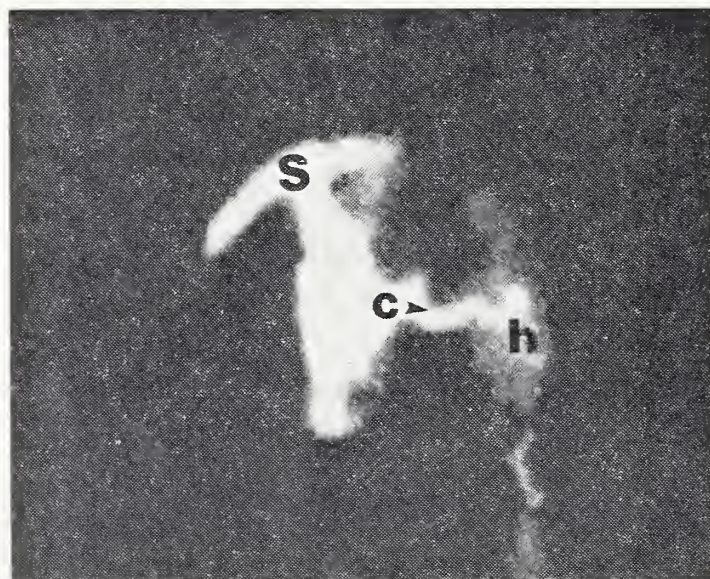


Figure 1. Cardiac flow study after antecubital vein injection of Tc 99m
S=Subclavian vein
c=Collateral venous circulation
h=Heart

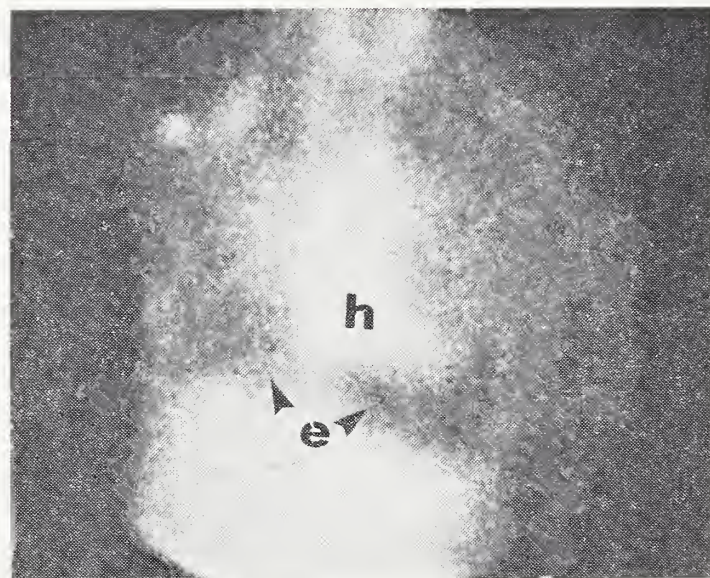


Figure 2. Whole chest scan
e=Pericardial effusion
h=Heart

A Multi-Agency Approach Hearing Screen for Preschool Children

The Bedford County Child Development Council (BCCDC) is an organization concerned with providing health and other services to children. It is supported by local offices of the departments of human services and public health, the local mental health center, the Shelbyville/Bedford County Child Development Center, and the Shelbyville Community Day Care Center.

In September of 1976, the BCCDC appointed Charlotte Farrar, speech pathologist for the Multi-County Mental Health Center at Tullahoma, to investigate the possibilities of establishing a free hearing screen for children.

At first, an infant hearing screen was considered, but this proved to be unfeasible for the Bedford County area. Instead, Ms. Farrar submitted another proposal to the Council—one that would successfully test preschool children between the ages of 8 months and 5 years.

Barbara Hanners, coordinator of the Regional Access Program of the Bill Wilkerson Speech & Hearing Center in Nashville, suggested a technique which had already been proven successful in some areas—the use of a cassette recorder to test children.

The child is placed on the parent's lap while the tester presents sounds from the cassette by means of a remote control switch. By careful observation of the child's responses, the tester determines whether or not the child hears the sounds. If the child responds to three out of four sounds on each side of the cassette, he passes the screen. If he fails, he is referred to an ear, nose and throat specialist for an otologic examination and further evaluation.

The proposal was adopted by the council, and in November of 1976 plans were formulated to hold the screen on May 20-21, 1977. Money to finance the project was donated by the United Steel Workers of America, Local 7509; the

United Textile Workers of America, Local 10803; and the United Communications Workers of America, Local 524.

Local physicians and members of other professional and lay groups cooperated to aid the project. Dr. Wallace L. Chambers, retired otolaryngologist, examined the children who failed the screen, counseled with parents, and made referrals to family physicians for treatment and further evaluation. The Retired Teachers Association provided registrars during the clinic, and transportation to and from the screen was provided by Church Women United.

A total of 175 children were tested by the program, and of that number, 30 were found to have problems and referred for further evaluation and treatment.

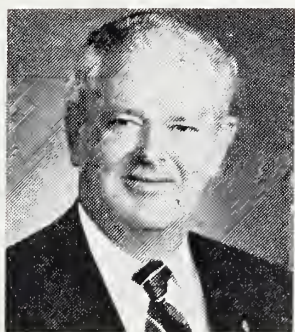
On the whole, reports on the screen have been favorable. The United Workers have made an additional donation to the council for the support of similar programs.

Because the council is aware that there are many children in the Bedford County area who were not screened in May, a similar program is planned for this year. The council also hopes to make parents more aware of the need for early detection and treatment of hearing impairments in young children.

Another goal is to provide more efficient follow-up. At present, there is no way to know exactly how many of the 30 children found in need of further evaluation and possible treatment are receiving it, even though families were advised by mail.

The multi-agency approach to providing screening and referral to preschool children has benefited many. Perhaps it is a project that can be successfully utilized by other communities. Anyone desiring information about the project may contact Charlotte Farrar, Multi-County Mental Health Center, 1803 N. Jackson St., Tullahoma, TN 37388 or call her at (615) 455-3476.

From the Tennessee Department of Mental Health and Mental Retardation, Nashville.



DAVID H. TURNER

**president's
page**

Health and Happiness

"Eat right, exercise, and be moderate, for tomorrow you will be healthy."—Grandmother

I want to begin this year by wishing for each of you a truly happy and healthy year. These two desirable attributes of life are closely related. If we assume health to be defined as the total (or almost total) absence of disease then we can see that it is not necessary to be healthy in order to be happy. But then we must recognize that happiness is a state of mental health.

In recent years we have been told by socialistic politicians that "health care" is a basic right. This has caught on to the extent that now there are those who declare that "health" is a basic right. I believe that we must accept the fact that health and also happiness are blessings from God.

The physician with medical expertise may remove and prevent disease but the greater responsibility rests with the individual, in most instances, since a person's health is influenced by temperament, character, habits, and his whole way of life.

Health is, in a large part, affected by or dependent upon virtue, for being well in body and mind has much to do with living well, with good habits not only of body but of life. We recognize that accident and misfortune can bring harm and ill health but we are in an important way responsible for our state of health. Think of the high percentage of physician visits that are made necessary by deviations from health for which the patient, or his way of life, is in some way responsible.

Most chronic lung diseases, much cardiovascular disease, most cirrhosis of the liver, many gastrointestinal disorders, numerous muscular and skeletal complaints, venereal disease, nutritional deficiencies, obesity and its consequences, and certain renal and skin infections are in large measure self-induced, or self-caused, and contributed to by smoking, overeating, overdrinking, eating the wrong foods, inadequate rest and exercise, and poor hygiene.

Several national "health insurance" proposals have been introduced in Congress and they all embrace, without qualification, the *no-fault principle*. They ignore, or treat as irrelevant, the importance of personal responsibility for the state of one's health.

Health is good, but not the greatest good. A long life as the result of good health is to be desired, but a good and worthy life is a greater attainment. There is no such thing as being too healthy; however, there is such a thing as being too concerned about health. To be preoccupied with the body is to neglect the soul, and this should indeed be our first concern, for a contented soul brings happiness.

Sincerely,

David H. Turner, M.D.

PRESIDENT

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JANUARY, 1978

editorials

Happy 1978—Or Something

I keep files of things to write editorials about. Usually I write editorials about things I don't keep files on. The files grow and some are small and some are big. Every now and then I throw away the files on those things that are no longer issues. Eventually, that's most of them. And so it goes. We win some and we lose some.

Happy New Year.

J.B.T.

Life and Death: Playing the Percentages

There is a sense in which every death is accidental, even though death is as much a part of life as is birth. Even the suicide is ultimately an accidental product of time, place and circumstance. Protecting life, one's own or another's, is mostly a matter of playing the odds, weighing the advantages or thrills against the disadvantages and dangers.

New York City was terrorized for over a year by the mindless killings of the psychopath known as "Son of Sam." At the time of his apprehension there had been six deaths out of twice as many assaults. That is not very many, considering there were 1,600 murders in New York City in 1976. The odds of being attacked by that particular killer in New York City might have been overall something like one in 3 or 4 billion. If you were a pretty girl with long hair it would go down maybe into the millions, but it would depend a lot on where you happened to be. The situation was particularly terrifying because the killer changed all the rules, so that New Yorkers were not sure what game they were playing. Most violent crimes, for example, involve people who know each other, so if you stay clean, you're pretty safe—usually. As one investigator put it, "It's like trying to identify a disease when you don't know the symptoms." It drastically changed the habits of several million people, sometimes permanently.

All of us to one extent or another take calculated risks every day, and in fact one of the greatest is simply getting up in the morning. When we talk of risk taking we are likely to think of people like Evel Knievel. That helps us preserve our sanity and function in the world. In fact, however, diabetics drink alcohol, people old and young smoke, and most of us drive or ride in automobiles. Those who do these things do them more or less without considering possible disastrous consequences, and almost everyone has a point, mostly subconscious, at which the risk becomes not worth taking. We know for example that illicit sex may get us VD or that walking in the rain may give us pneumonia, and into our computer go these facts, along with the pleasure to be derived and the likelihood or unlikelihood that antibiotics can bail us out, and a decision is made, rationally or otherwise.

But mostly we do not consider death. There are places in New York, Nashville, Memphis, or maybe even Wauhatchee where one would not go at night without a pressing reason. There are other places one would not go even in the daytime. The lifestyle of a diabetic would change tremendously if he could not get insulin, as would that of an anginal victim without nitroglycerine. They might die.

There are terrors, like "things that go bump in the night," against which we have no defense. The ballpark is dark, if we even know where it is at all. It is hard to figure the odds. "Son of Sam" struck in areas once considered safe. Progressively he broadened his range of victims. In such a situation every person can become in his own mind an accident looking for a place to happen. If a major portion of the population should enter into this mind-set, one man could paralyze an entire city.

Or take airplane hijacking. There is an outside chance of it these days with every flight. Terrorists are increasing in numbers and are becoming increasingly bold. Generally they have some definite end they wish to accomplish, but there is no doubt a subconscious wish, if not a conscious one, to paralyze civilization. We all continue to fly, but what would it take to make us cease flying?

We need to stop every now and then and get things into proper perspective. Every person who rides in an automobile is in infinitely greater jeopardy there than in a city with "Son of Sam." It is hard to do anything about that risk, as riding in automobiles seems necessary for our existence, so we cheerfully face whatever risk there is.

There are at least two things we should learn from all this. One is that in addition to necessary risks, we all take risks which are unnecessary and usually unprofitable. Preventing them comes under the heading of preventive medicine. It is up to physicians to get to people before they become patients, to educate them; to convince them, for example, that smoking is dangerous, and that there are dangers to their health from smoking which are even greater than cancer. They need to be convinced immunizations do work. The country is on an exercise kick right now, but people need to understand that even exercise will not cover gluttony. That will do for starters. There are many other areas in which the public needs educating. If we neglect our

part in it, no one is likely to get it done, and the risk goes up.

The other point is that terrors, seen and unseen, abound, but until something goes bump in the night death is rarely considered. When something does go bump the unprepared are apt to come unglued. Someone has said one is not prepared to live until he is prepared to die. This is true whether he considers it a matter of luck or the will of God. It does no good to curse either.

There are several things to be considered. There is the sorrow of separation from loved ones, and if our treasure is here, there is the sadness of leaving it behind. But mostly there is fear of the unknown.

Every now and then I used to see signs along the highway, painted on rocks usually, which said, "Prepare to meet God." The highway is a good place for such timely warnings, as few people die atheists unless they die suddenly. To quote a World War II soldier, "There are no atheists in foxholes."

It is better to meet God before death than wait until after. Either way, things which go bump in the night will no longer matter. That's a good thought for a new year.

J.B.T.

Thinning the Veneer

Living together requires codes of conduct, even though they may be unwritten, and because transgression leads to breakdown of society, enforcement and quick punishment are carried out in primitive human societies, and among lower animals as well, where there are only a few more or less instinctive rules. It is a matter of preservation of the species.

Codes among primitive peoples generally center around religion and consist more than anything else of taboos—negative laws—to preserve family and possessions and to promote fertility of land, domestic animals, and wives (not necessarily in that order). The simplicity of the lifestyle does not transfer to the codes and rituals, which can be incredibly complex, taking up much of the time and effort of the people, particularly of the men, and which are the source of most primitive art.

The first written laws of which we have any record were codified by Urnammu of Ur between 2060 and 2043 BC. Abram would have left Ur

in about 2000, and would have known and probably followed the Sumerian code. When his descendents came out of Egypt in about 1300 BC, through Moses God gave Israel the Decalogue, the simplest and at the same time one of the most comprehensive legal codes ever written. It was supplemented later by the more complex Deuteronomic Code.

The ancient Jews followed the code for a while, but during the time of the Judges, a bare 300 years later, we are told that "in those days there was no king in Israel, and every man did what was right in his own eyes." The situation became so bad that Saul was annointed king of Israel in order to have some sort of central authority, and the federal bureaucracy was established.

During the past couple of years my various jobs have taken me over a good deal of this country. I have driven at least a little in most of the places I have been, and in doing so I have carried out a little experiment which has led me to some interesting conclusions. The experiment is not very well controlled, and though my actual figures may be off some, in general I think they are right. My conclusion is that there is widespread disregard for the 55-mile-an-hour speed limit by at least three-quarters of the people of this country.

I found if I went 55 miles an hour, I got run over by almost everything on the road. At 65 I passed and was passed by about equal numbers of cars. I had to go 70 to pass very many trucks, and a good many cars still passed me. I conclude that most people, at least in the Southeast, drive between 60 and 70, and the median is about 65.

There is rather marked disparity, however, from one part of the country to another. In the Northeast few people drive over 60, but then they never have. Distances are not great, and highway speed limits there have always been 50 or 55, so they are doing what comes naturally. In Michigan and in the West, except California where the people mostly drive about 60 to 65, I have driven 70 and been passed by almost everything on the road. In the West the distances are so great that it has always been customary to "floorboard it," so they have slowed down some, too.

It should be possible, as people become more civilized, to decrease the number of laws, as to be civilized implies the ability to live together. Probably because man is basically uncivilized, it doesn't seem to work that way. To paraphrase

Pogo, "Scratch a civilized man and you find a barbarian." It actually is much simpler to live by having a rule for everything, but whether such a code is oppressive depends on whence it is imposed and how it is enforced. The Deuteronomic Code was greatly expanded to the Torah, which has a rule for almost everything. After a while, though, only a few continued to take it seriously, and, like the New Testament, it was widely considered just an ideal—great, and much to be desired, but impractical.

The United States has always, since its founding, tottered on the brink of anarchy. It is a part of our frontier heritage, where also there was "no king, and every man did what was right in his own eyes." The Volstead Act worked very well for a few years, until a post-war generation decided it was going to drink, and drink it did, opening up the country to organized crime. We have never recovered.

Socialized medicine works in England because in the sense that I previously used the term "civilized" England is probably the world's most civilized country. Even the police do not require guns. Generally the English are a docile lot. Socialized medicine had rougher going in Canada, where the people are more like us, and in New Zealand I understand it was thrown out. I have the feeling it will fare no better here, because not only will the physicians not like it, the patients will not stand for the regulation it will require, and ways will be found to circumvent it. It would be a shame to reach the point of no return before we recognize it will not work.

It is a mistake to have laws on the books which almost no one intends to obey. It breeds disrespect for law in general, and since history and observation both show this comes naturally, we do not need that help. Enforcement of trivial laws keeps our already shorthanded and overworked law officers from places where they are really needed.

We need laws to protect society, but in order to protect society laws must require only minimal enforcement. Otherwise an army (or an outsized bureaucracy) is necessary. We can protect society best by not passing laws no one intends to obey.

J.B.T.

No More Foundations!

A friend of mine who became a medical school department head remarked that when he was

young the only person he knew of who was addressed as "Professor" was the piano player in a bawdy house. While he told it as a joke, it says something about the division of labor and work attitudes.

As far back as there is any ethnologic information there have been those who worked and those who did not, and mostly the former worked for the latter. In many primitive societies the men spent, and still spend, their time in religious pursuits, and the women work. In other societies there were slaves who worked for the leisure class, and there was another class which included the artisans and merchants. It has been pretty universal to have a ruling class who did not work and the rest who did.

When my medical class was casting about for internships, one of my classmates remarked he didn't want to be a cuttin' doctor—he wanted to be a thinkin' doctor. This is pretty much the way the division of labor has gone. There have been those who work with their hands and those who work with their heads. The upper classes had certain avenues open to them: medicine (which early excluded surgery—that was the realm of the barbers—a lower class), the law, theology, and the military. They would not stoop to soiling their hands in common labor.

Egalitarianism has made this division of labor a real problem, as everyone wants to be an administrator. And have you noticed—everyone wants to be called "Doctor"? In order to have chiefs, though, there have to be Indians, or nothing gets done. This is precisely our problem in this country today. Certain jobs, which traditionally the "upper classes" refused to do, are considered demeaning, and though on the welfare roles there are many deserving individuals, the ranks are swollen not by those who cannot find work, but by those who cannot find work they do not consider demeaning.

During the Great Depression of the '30s a lot of people found they could hold down jobs they never considered possible, and even at present there are lots of Ph.D.s in the cities who are doormen, bartenders, hack drivers, and what have you. The unemployment figure could be cut considerably if people were willing to work, for example, as domestic servants, or do common labor.

A better educated and more scholarly man never lived than the Apostle Paul. He was, as he said, "a Hebrew of the Hebrews," a Pharisee

and an accomplished lawyer. But he earned his living as a tentmaker, and admonished the young church that he who would not work should also not eat. Adam was put to work as a part of his salvation after his expulsion from the Garden of Eden. Because of this, there has always been a strong work ethic in Western culture, and in fact the *Authorized Standard (King James) Version* of the Bible, which has always been considered the infallible translation, in a listing of the Christian virtues mistranslates the Greek "not flagging in zeal" to read "not slothful in business" (Romans 12:11).

We should not go back to slavery or sweatshops. A workman is worthy of his hire and should be paid an adequate wage. But while the minimum wage law is expensive, and has been as much responsible as anything else for the high cost of medical care, that is not what will break us. What will finally do us in is welfare for those who will not work, among other reasons because they cannot be chiefs.

We need to come to the realization that no honest job is demeaning, and to get away from the notion that a chief is somehow "better" or more important than his Indians. In the first place, neither was able to choose his parents, his skin color, nor his place of origin, all of which had more influence on his development and his present situation than anything for which he is responsible. That fact alone should keep us all humble. In the second place, no machine can run without all its parts.

One hot day last summer I was looking out the window of the air conditioned doctors' lounge in the hospital where I work, watching a man leaning on a jackhammer. I thought, "What a way to make a living." Reading his mind, I discerned he was thinking, "What a way to make a living!" But he was willing.

When everyone has to be a chief, who will dig our foundations?

J.B.T.



Thomas W. Green, age 56. Died November 13, 1977. Graduate of Medical College of Virginia. Member of Sullivan-Johnson County Medical Society.

new members

The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY

Richard A. Krause, M.D., Chattanooga

Jerry W. Mitchell, M.D., Chattanooga

KNOXVILLE ACADEMY OF MEDICINE

Paul B. Serrell, M.D., Knoxville

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY

George M. Ryan, Jr., M.D., Memphis

NASHVILLE ACADEMY OF MEDICINE

Wilbert E. Brooks, M.D., Nashville

Thurman D. McKinney, M.D., Nashville

John M. Omohundro, III, M.D., Nashville

SULLIVAN-JOHNSON COUNTY MEDICAL SOCIETY

Michel N. Haddad, M.D., Kingsport

personal news

Carl E. Adams, M.D., Murfreesboro, has been appointed by Governor Blanton to a three-year term on the Medicaid Medical Advisory Committee, which oversees the operation and programs of the Medicaid program in the state. Member physicians appointed to two-year terms on the committee are *Harold Vann, M.D., Clarksville*; *Hays Mitchell, M.D., Cleveland*; and *Robert H. Haralson, M.D., Maryville*.

The following physicians have been elected Fellows of the American College of Surgeons: *Narayana B. Bhat, M.D., Huntingdon*; *John P.W. Brown, M.D., Columbia*; *Joel B. Clements, M.D., Chattanooga*; *Adolph Fiedler, Jr., M.D., Columbia*; *James M. Fitts, Jr., M.D., Columbia*; *Avelino V. Mercado, M.D., Chattanooga*; *John M. Senter, Jr., M.D., Paris*; and *Dale A. Van Slooten, M.D., Lewisburg*.

The Knoxville Area Pediatric Society elected the following officers for the coming year: *Mary Bukovitz, M.D., Morristown*, president; *Tom Lowry, M.D., Knoxville*, secretary.

The Southern Medical Association announced at their 71st annual scientific assembly in Dallas that *G. Baker Hubbard, Sr., M.D., Jackson*, is retiring from his positions of chairman of the council and councilor to become first vice-president of the association. *John B. Lynch, M.D., Nashville*, has been appointed councilor from Tennessee to the association.

R. Donothan Ivey, M.D., Crossville, has been elected a Fellow of the International College of Surgeons.

John B. Lynch, M.D., Nashville, has been elected historian of the American Society of Plastic and Reconstructive Surgeons. He was chosen during the 46th annual convention of ASPRS in San Francisco.

James G. McMillan, M.D., was honored by the city of Jasper in appreciation of his 35 years of dedicated service to that community. Dec. 10 was set aside as "Dr. James G. McMillan Appreciation Day."

Sam Meredith, M.D., Cleveland, has been certified as a Diplomate of the American Board of Orthopedic Surgeons.

Robert Overholt, M.D., Knoxville, has been named chairman of the 1978 United Way campaign for that city.

Yashwant Patel, M.D., a Fayetteville internist/gastroenterologist, has been certified as a Diplomate of the American Board of Internal Medicine.

James R. Royal, M.D., Chattanooga, was named "Family Physician of the Year" by the Tennessee Academy of Family Physicians at its annual meeting in Gatlinburg.

John W. Runyan, Jr., M.D., Memphis, chairman of the department of community medicine and director of the division of health care sciences of the University of Tennessee College of Medicine, has been selected a winner of the 1977 Rockefeller public service awards in the area of promotion of health, improved delivery of health services, and control of health costs.

Robert S. Sanders, M.D., director of the Rutherford County Health Department, Murfreesboro, was presented the "Public Health Worker of the Year Award" by the Tennessee Public Health Association at their annual meeting in Nashville in November. Dr. Sanders was honored by his co-workers for his role in passage of recent state legislation, HB 300, the Tennessee Child Passenger Protection Act of 1977.

Paul Spray, M.D., Oak Ridge, has been named chairman of the board of Medico, and in connection with that post will serve as vice president of Care, Inc.

Chester G. Allen, M.D., Memphis, has been elected president of the St. Joseph Hospital medical staff. Other new officers are *Michael Silverman, M.D.*, president-elect; and *Edward W. Reed, M.D.*, secretary, both of Memphis.

McCarthy DeMere, M.D., the Memphis physician-attorney who authored the American Bar Association's definition of death, has been named to assist in the development of a national Uniform Determination of Death Act. Dr. DeMere will serve as an ABA representative and adviser to the National Conference of Commissioners on Uniform State Laws.

John R. Nelson, Jr., M.D., Knoxville, has been in-

stalled as president of the Knoxville Academy of Medicine. Other new academy officers are *Robert B. Whittle, M.D.*, vice-president; *Robert F. Lash, M.D.*, secretary; *Joseph B. Moon, M.D.*, treasurer; and *William A. Nelson, M.D.*, president-elect, all of Knoxville.

John D. Pigott, M.D., Memphis, has been installed as the president of the Memphis-Shelby County Medical Society. Other new society officers are *Allen S. Edmonson, M.D.*, president-elect; and *James A. Moore, M.D.*, secretary, both of Memphis.

Thomas Carter, M.D., Westmoreland's only physician, was honored by the city when it dedicated its 1977 Christmas parade to him.

Frank Vallejo, M.D., a Tullahoma internist, was elected president-elect of the Coffee County Medical Society at their meeting, Nov. 15. *Coulter S. Young, M.D.*, was elected vice-president and *Harrison Yang, M.D.*, was named secretary-treasurer. Both are from Manchester.

programs and news of medical societies

Maury County Medical Society

The Maury County Medical Society held its December meeting at Sarge's Restaurant, Culleoka, Tenn. Thirty-one members were present. Mrs. Ann Lindsay, ultrasound technologist, assisted with the scientific program and Dr. Robin Lyles served as social and dinner chairman. The guest speaker, Dr. Arthur Fleischer of Vanderbilt University, gave the lecture "Panorama of Diagnostic Ultrasound." The lecture included uses of ultrasound in obstetrics, gynecology, biliary tract surgery, diagnosis of pancreatic lesions, detection of cysts, and pericardial effusions. After the lecture, Dr. Thomas Dake presided over the business meeting in the absence of the president, Dr. Tom Young, who was out of state.

Dr. John Williams reported the following nominations from the nomination committee and these were elected by acclamation: president—Dr. Tom Dake; vice-president (president-elect)—Dr. Valton C. Harwell; secretary-treasurer (TMA delegate)—Dr. Thomas Duncan; alternate delegate—Dr. Lawrence Nickell; member of board of censors for three-year term Jan. 1, 1978 through Dec. 31, 1980—Dr. Rufus Clifford.

medical news in tennessee

ETSU Announces Faculty Members

Two associate deans and one departmental chair-

man have been appointed to the East Tennessee State University College of Medicine, according to an announcement from President Arthur H. DeRosier and Dean Jack Mobley.

Dr. Charles Felzen Johnson of the University of Iowa has been named associate dean for continuing education; Dr. Charles Lesley Votaw of the University of Michigan is the new associate dean for clinical sciences; and Dr. Dwight Wilson Lambe Jr. of Emory University has been named chairman of the department of microbiology.

Dr. Johnson, a graduate of the UCLA Medical School, has been an assistant professor and a professor at Iowa. He is a Fellow of the American Academy of Pediatrics and the American Association on Mental Deficiency, and a member of the editorial board and editor of the syndrome section of *Clinical Pediatrics*.

Dr. Votaw is a graduate of the Michigan Medical School and has been on the staff there the past 21 years. An anatomist, Dr. Votaw has served the past two years as associate dean for curriculum, professor of anatomy, and has been responsible for the operation of the undergraduate medical curriculum at Michigan for the past six years. He is a member of the American Association of Anatomy and the American Society of Zoologists and holds associate membership in the American Academy of Neurology.

Dr. Lambe has been affiliated with the Emory University School of Medicine since 1968 as associate professor of pathology, assistant professor of allied health sciences and chief of the microbiology section. He received his Ph.D. in medical microbiology at Wayne State University and served as a visiting research associate at Orebro (Sweden) Regional Hospital.

ETSU Accepts First Medical Students

The ETSU College of Medicine passed one more stage in its long process of development last month with the announcement that applications for admission to the new college are being accepted.

"Approval for accepting applications for the historic first entering class was given by the Liaison Committee on Medical Education," said President Arthur H. DeRosier in making the announcement.

"We are extremely hopeful that the first 24 students will enter the College of Medicine next fall. That eventuality will depend on receiving provisional accreditation from the LCME, and we expect to clear that stage next spring or early summer," he added.

Dr. DeRosier emphasized that no positions in the first class can be committed until provisional accreditation is accorded.

With approval of the State Board of Regents, an admissions committee composed of 14 members of the College of Medicine faculty will determine policies and procedures for admission to the school and will eventually select students for the first class.

From the AMA's Office in Washington, D.C.

Year-End Status of Health Legislation

With the exception of a few high-priority items, Congress has finished its business for this year. Still to be completed this session are boosts in Social Security taxes, the administration's energy bill, and the Health, Education and Welfare Department appropriation bill. A few other measures might make it through during the bobtailed, every-three-days work schedule. Most hearings are over. Most congressmen have gone home.

Among the health measures definitely put off until next year are the administration's disputed hospital cost containment plan, the clinical laboratories bill extending federal authority, and a revision of the nation's drug laws.

One of the final bills approved by the lawmakers during their regular session was an 18-month postponement of the proposed ban on saccharin by the Food and Drug Administration. Under the legislation, saccharin products must bear labels warning that the product has caused cancer in test animals.

Another last-minute approval was for a one-year extension of the special pay provisions for Veterans Administration physicians.

The conference report on legislation to help rural health clinics by allowing Medicare and Medicaid reimbursement for physician extender services was hung up for most of the month, but finally approved by both Houses—thus clearing it for the President's signature.

In a somewhat unexpected action, House and Senate conferees reached last-minute agreement on the controversial medical school capitation *quid pro quo* for admission of foreign-trained U.S. students. The compromise will repeal that condition after one year, but require a 5% increase in third-year enrollment in the meantime.

The impasse between House and Senate over language dealing with Medicaid abortion funding has dragged on for months. There was no resolution by the end of the regular session, forcing Congress to approve a temporary funding resolution to keep the HEW and Labor Departments going. The House wants to forbid use of Medicaid funds for abortions unless necessary to save the mother's life. The Senate wants broader language allowing abortions, for example, where "severe and long-lasting physical health damage" to the mother would result and for victims of rape and incest. An emotion-laden, bitter controversy pitting the right-to-life forces against the pro-abortion forces has enveloped the House and Senate for months.

The major reason for the odd recess arrange-

ment is the lengthy hassle over President Carter's sweeping energy program.

Unlike an election year when a new Congress convenes, the second session of the same Congress merely takes up where it left off. There is no need to reintroduce bills and start all over again.

AMA, AHA, and FAH to Draft Cost Cap

The American Medical Association, the American Hospital Association, and the Federation of American Hospitals have accepted an unusual challenge from Congress and agreed to develop a voluntary hospital and health care cost containment program.

The challenge was posed by Rep. Dan Rostenkowski (D-Ill.), chairman of the House Ways and Means Subcommittee on Health. In a House speech, the lawmaker conceded that Congress would not be able to resume deliberations on the administration's controversial cost containment proposal until next February.

During this brief grace period, he said, the three major provider organizations should take the initiative "and effectively and significantly restrain cost increases on a voluntary basis."

Government intervention and the imposition of controls "should be a last resort," asserted Rostenkowski, raising the possibility that the administration's plan for a 9% "cap" on hospital revenue increases might be in deep trouble if the private sector satisfies the lawmakers in the interim.

James H. Sammons, M.D., executive vice-president of the AMA; President John Alexander McMahon of the AHA; and Director Michael Bromberg of the FAH made the following joint statement:

"Our three organizations, at the instruction of our respective officers, are beginning now to organize a national steering committee of hospital people, doctors, insurers, consumers and others with a major stake in hospital cost containment. We will ask this committee, which we expect to have its first meeting within the next several weeks, to develop the goals and mechanisms, first, of a voluntary program to reduce the rate of increase in hospital costs, and, second, of a voluntary program to reduce the rate of increase in health care costs as a whole. We will also encourage the development of similar steering committees at the state level to help implement these programs."

Later it was announced that the national steering committee will meet in December to draft guidelines to restrain hospital cost increases.

"The primary enforcing power in the program will be public accountability," said Director Michael Bromberg of the FAH. The AMA and the AHA have launched a voluntary program in hopes of averting a federal "cap" on hospital revenues. Bromberg told the Washington Business Group on Health that hospitals "that fail to meet the screening criteria will be listed periodically. The review and findings of industry committees at the state level, as to the

justification for each hospital's exceeding the screen, will be made public."

Bromberg said the anticipated publicity attendant on any hospital which fails to stay within the screen and the public exposure of the reasons why is expected to provide a substantial incentive to a hospital to restrain its charge increases.

The FAH leader emphasized his belief in the private sector's ability to devise a workable alternative to an "arbitrary cap" and to engage in voluntary enforcement of such a plan.

"If we fail," he said, "then government will take even more control of the health system. If we don't bite the bullet, government will assume management responsibilities from health providers, insurers and industry. The result will be more inflation and less quality."

Feds Push Second Opinion for Surgery

The federal government plans a major campaign to urge the American public to seek opinions on surgery.

The unusual and precedent-setting program involving patients' dealings with physicians will be conducted by the HEW Department. Both Medicare and Medicaid programs will be geared to encourage second opinions.

The policy was announced by Hale Champion, HEW under secretary, before the House Commerce Subcommittee on Oversight and Investigations. The subcommittee, headed by Rep. John Moss (D-Calif.), has been holding hearings this year and issuing reports charging there is much unnecessary surgery in the United States.

Champion told Moss "you have been right."

"Comparisons with prepaid delivery, geographic variations in rates of surgery, and historical trends all point to the fact that there is more surgery in the United States today than there ought to be," said Champion.

"Accordingly, we are going to begin a major effort to encourage the American public, and especially our own beneficiaries, immediately to seek second opinions," he testified.

The department has been instructed to remove the remaining legal barriers to patient-elected second opinions in Medicare. States will be requested to implement as quickly as possible active second opinion programs for Medicaid.

If two physicians disagree, Medicare will pay for a third opinion if the patient desires one, according to HEW.

At present Medicare will pay for a second surgical opinion if the physician agrees to the advisory or orders it. But the physician's acceptance is at present mandatory. In the future the patient would be reimbursed for a second opinion if the initial physician believes it unnecessary.

One question to be answered is whether the patient must receive a negative response on a second

opinion from the first physician, or simply could go off on his own to get a second opinion without even asking the physician.

Champion also told the Moss subcommittee he will ask professional standards review organizations (PSROs) "to move aggressively into review of surgical services."

Champion said that with the advice of the National PSRO Council, "We're going to develop criteria for ten of the most common surgical procedures and distribute them to the PSROs by this February." By January 1979, criteria for 75% of the most common surgical procedures within each specialty will be prepared, he said.

"We will do our best to see that these criteria are specific and measurable, and applied without unreasonable modification by the local PSROs," the official told the subcommittee.

AMA-Backed Legislation Introduced

Rep. Tim Lee Carter, M.D., (R-Ky.) has introduced legislation sought by the AMA dealing with funding for residencies in preventive medicine and labeling of prescription drug containers.

The labeling bill would require that drug containers as dispensed to patients carry the established or trade name together with the quantity and strength of the drug. The AMA said that in cases of medical emergency it is often important for attending medical personnel to know the name, strength, and contents of any drugs a patient is taking.

Under the bill introduced by Dr. Carter, ranking GOP member of the House Commerce Subcommittee on Health, an exception to the labeling is provided when the physician decides that for medical or emotional reasons it is in the best interest of the patient that the information not be made known to him or indirectly to the patient's family or associates.

The other bill introduced by Rep. Carter calls for an amendment to the Health Manpower Law to provide funding for residencies in preventive medicine. Specific program funding for such residencies was not included in the Health Manpower Law as passed.

The AMA said these residency programs are very dependent on outside funding because they generate little patient income to support their activities. The increased focus on preventive medical care makes it important that these residency programs continue, according to the AMA. The bill would provide federal funds for approved residency programs in preventive medicine and would also provide traineeships for those physicians participating.

Preventive Medicine Legislation Proposed

The AMA has recommended that the administration propose increased funding for programs em-

phasizing preventive health care and promote cost effective delivery of services.

More federal funds were sought for venereal disease control, migrant and Indian health care, family planning, immunization programs for diseases such as polio and measles, prevention and treatment of mental disorders, and alcoholism.

In a letter to the White House Office of Management and Budget, the AMA asked that its recommendations be incorporated into President Carter's fiscal 1979 budget slated to be sent to Congress early next year.

Largest recommended increase was \$250 million for National Institutes of Health disease and injury research and treatment programs. The AMA also asked increases for services to older Americans, for prevention and treatment of mental disorders, for health services to mothers and children, for health care for Indians, and for alcoholism.

Drug Marketing Practices

There are no big differences between generic and brand name drugs according to the commissioner of the Food and Drug Administration, Donald Kennedy, Ph.D. Dr. Kennedy told the Senate Monopoly Subcommittee that some of the larger pharmaceutical houses frequently buy products from smaller generic producers and sell them under the larger firm's brand name.

"Drug marketing follows many patterns," Dr. Kennedy said. "A formulator may make a product and sell it only under his own label; he may also have a trade name and a generic line selling it both ways. He may also sell this product to other drug firms; or have them make the product for him. So a formulator may also be a repacker or an own-label distributor at different times under different circumstances. To give an idea of the number of firms producing drugs, ampicillin, a widely used antibiotic, available under 224 product labels, is produced by only 24 formulators; 219 conjugated estrogen products are produced by 45 manufacturers."

Dr. Kennedy said that drug firms frequently lease the facilities of different firms for the manufacture of various products which may still be marketed under a brand name.

The commissioner told Sen. Gaylord Nelson (D-Wis.), that evidence from the FDA's 250,000 annual drug inspections shows that "only a small percentage of drugs are not in compliance with compendial or application specifications . . . we also find no evidence of widespread differences between the products of large and small firms or between brand name and generic products."

Califano and the HMOs

The Carter administration's new-found love affair with health maintenance organizations (HMOs), an old flame of the Nixon administration—is flourishing.

HEW Secretary Joseph Califano is inviting 500 large corporation representatives to Washington, D.C., Feb. 7 to make a pitch for the establishment of HMOs for their employees to replace fee-for-service, regular health insurance plans.

He made the announcement at a ceremony in New York City certifying the huge, 3.25 million-member Kaiser-Permanente prepaid health plan as an HMO. As a result, Kaiser becomes eligible for certain federal loans and loan guarantees and has an easier job dealing with Medicare and Medicaid contracts with the government.

In addition to meeting with corporations, Califano is expected to sit down with labor leaders to urge them to push HMOs in conjunction with the management effort.

In the drive to promote establishment of the prepaid plans, Califano said HEW has cut qualification time for new HMOs by almost 40% by assigning extra staff and streamlining the paperwork.

Some Health Statistics

Total national health expenditures, including government contributions, were 20% greater per capita for the more affluent than for the poor and almost 60% greater for whites than for racial minorities, a government report says.

Per capita health care expenditures averaged \$258 for a white individual, \$162 for a minority, \$265 for a person above the poverty line, and \$213 for a poor person according to a HEW study.

The report also shows higher mortality rates in large city poverty areas among minorities than among whites, and higher levels of disability among the poor.

Racial minorities, which comprise more than 40% of the nation's poor, the report said, suffer five times the tuberculosis mortality rate than white Americans do, three-and-a-half times the maternal, and a 42% greater overall mortality rate.

The data also show the impact of Medicare and Medicaid: The number of physician visits increased more for the poor and minorities than for others between 1964 and 1973. By 1973 the poor had more doctor visits than the nonpoor. Poor whites averaged 5.7 visits per person per year (4.7 in 1964), while poor minorities averaged 5.0 (3.1 in 1964). Nonpoor whites averaged 5.0 visits in 1973 (4.7 in 1964), and nonpoor minorities 4.3 (3.6 in 1964).

"Health Food" Fad Hit

The FDA commissioner has stung health food advocates in an interview in *U.S. News & World Report*. In reply to a question as to whether health foods, due to the absence of food additives, are safer than regular supermarket products, Donald Kennedy, Ph.D., replied:

"There's not a bit of logic in that. Even if you assume that food additives are generally bad for

you, it doesn't follow that their absence somehow confers safety.

"Aflatoxin, a mold product that grows on corn and peanuts, is as natural as can be and about the worst carcinogen we know," the commissioner said.

"The 'natural' foods often cost more, but have no benefit that we can see over foods available in the regular marketplace."

announcements

CALENDAR OF MEETINGS

NATIONAL

1978

- Jan. 25-28 Southern Society for Pediatric Research
Braniff Place, New Orleans
- Jan. 28- Feb. 3 American Society of Contemporary
Medicine and Surgery, Americana Hotel,
Bal Harbour, Florida
- Feb. 8-12 American College of Psychiatrists,
Royal Sonesta, New Orleans
- Feb. 9-11 Society of University Surgeons, Galt
House, Louisville
- Feb. 19-22 Southeastern Surgical Congress, Fair-
mont Hotel, New Orleans
- Feb. 22-23 American Orthopaedic Society, Dallas
- Feb. 22-26 American Association of Genito-Urinary
Surgeons, Ocean Reef Club, Key
Largo, Florida
- Feb. 22-26 American College of Nuclear Phy-
sicians, San Francisco
- Feb. 23-28 American Academy of Orthopaedic
Surgeons, Convention Center, Dallas
- Mar. 2-4 Diseases of Large Bowel, Fontaine-
bleau Hotel, Miami Beach
- Mar. 6-9 American College of Cardiology, Dis-
neyland, Anaheim, California
- Mar. 6-10 International Academy of Pathology
(US-Canadian Division), Hilton Hotel,
Atlanta
- Mar. 10-15 American Society of Abdominal Sur-
geons, Caesar's Palace, Las Vegas
- Mar. 13-16 American College of Surgeons, Cincin-
nati
- Mar. 29-31 American Society for Clinical Phar-
macology and Therapeutics, Peachtree
Plaza Hotel, Atlanta
- Mar. 29- April 2 American Society for Dermatologic
Surgery, Vacation Village, San Diego

TMA Employs Staff Attorney



The Tennessee Medical Association announces the employment of Mr. Charles David (Dave) Morison to serve as staff attorney and assist in the legislative program and activities of the Association. He comes to the TMA after being in the practice of law in Clinton, Tenn., and most recently in Nashville.

A native of Kingsport, Tenn., Morison, age 30, received his B.S. degree in English from East Tennessee State University in 1969. In 1973 he received his J.D. degree from the University of Tennessee School of Law. Prior to entering private practice, he served as a legal analyst for the Tennessee Legislative Council and as a legal research assistant for the University of Tennessee-Knoxville.

He is a member of the Tennessee Bar Association and American Bar Association and admitted to practice in both state and federal courts.

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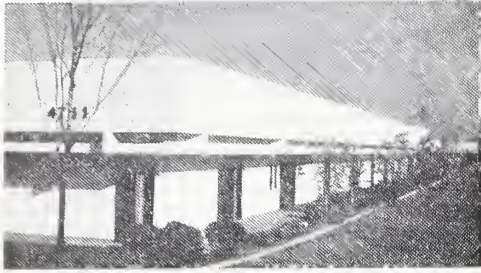
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APRIL 1978						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
			TMA 143RD ANNUAL MEETING Hyatt Regency Hotel - Knoxville			
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	NOTES					

Disseminated Histoplasmosis in an Immunosuppressed Patient

Lauren A. Daman, MD, Ken Hashimoto, MD, Robert J. Kaplan, MD, and William G. Trent, MD, Memphis. (*South Med J* 70:355, March 1977.)

A renal transplant recipient was receiving prednisone and azathioprine therapy when he developed fever, cough, and erythema-nodosum-like lesions on the extremities. Disseminated histoplasmosis was diagnosed by skin biopsy. Disseminated histoplasmosis should be considered when a patient under immunosuppressive therapy develops a lesion similar to erythema nodosum or erysipelas with panniculitis.

Salmonella Empyema: A Review

Donald P. Burney, MD, R. Darryl Fisher, MD, and William Schaffner, MD, Nashville. (*South Med J* 70:375, March 1977.)

A 35-year-old man developed salmonella pleural empyema during a three-month illness. Cultures of the empyema fluid yielded *S enteritidis*, serotype typhimurium. Cure was achieved by decortication and obliteration of the pleural empyema space, in combination with chloramphenicol therapy given parenterally. Review of the published reports revealed eight similar instances of salmonella empyema. Manifestation and treatment of this group are reviewed.

Malpractice Viewed in Perspective

Charles W. Quimby, MD, LLB, Nashville. (*South Med J* 70:75, Jan 1977.)

The current malpractice crisis, the increase in the number of suits brought and the size of the verdicts, is only a small part of a much larger problem. This larger problem arises because the evolving social policy toward the injured person is out of line with some established social institutions. If physicians are to help fashion a long-term solution to the malpractice crisis, they must understand this larger problem.

The Urine Culture Revisited

Jay F. Lewis, MD, and Jane Alexander, BS, MT (ASCAP), Chattanooga. (*South Med J* 70:15, Jan 1977.)

A review of urine cultures over a period of several months revealed the importance of critical review of the cultures for contamination, and also pointed up the need for developing studies to evaluate criteria used in selecting patients for urine cultures.

Ibuprofen in Osteoarthritis

Marshall L. Koonce, MD, Memphis. (*South Med J* 70:49, Jan 1977.)

In a double-blind, multiclinic study, 437 patients with osteoarthritis were treated (sequentially) with ibuprofen, 1800 mg/day, and placebo, or with aspirin, 3600 mg/day and placebo. Each treatment was given for four weeks. Considering relief of pain, ability to function, and general well-being, the patients preferred drug to placebo, usually by a statistically significant margin. Combined results showed no significant differences between ibuprofen and aspirin. Patients' evaluation of exercise-related pain, ability to perform a selected activity, and total discomfort and disability, all favored drug over placebo, and the differences were significant for a number of endpoints. The results indicated ibuprofen, 1800 mg/day, offers about the same antiarthritic benefit as aspirin, 3600 mg/day. Both drugs are superior to placebo. The incidence of gastrointestinal complaints with ibuprofen was similar to that with placebo and significantly lower than that with aspirin.

Experience With Deep Hypothermia and Elective Circulatory Arrest for Cardiac Surgery in Infants

Thomas B. Caldwell, III, MD, Joseph N. Blunk, MD, and Alfonso Escobar, MD, Nashville. (*South Med J* 70:681, June 1977.)

During hypothermic circulatory arrest (19 C nasal) averaging 55 minutes in 25 infants, the mean increase in base deficit was only -3.95 mEq/liter, when arterial gases before circulatory arrest were compared with samples ten minutes after perfusion had been resumed. Few significantly arrhythmias occurred, and all survivors appeared neurologically normal at discharge.

Massive Gastrointestinal Bleeding and Perforation of a Duodenal Diverticulum With Coexisting Pancreatitis

Irving K. Ettman, MD, and Thipivan Kongtawng, MD, Memphis. (*South Med J* 70:761, June 1977.)

A case of perforation and bleeding from a diverticulum of the second portion of the duodenum in a patient with recurrent pancreatitis is presented. Upper gastrointestinal roentgenogram revealed an abnormal tract and retroperitoneal air rising from the diverticulum. The fistulous tract communicated with pancreas. Bleeding was due to erosion of the wall of the pancreaticoduodenal artery. Extensive bleeding should suggest involvement of blood vessel.

Psychologic Response to Coronary Artery Bypass

Susan L. Merwin, BS and Harry S. Abram, MD, Nashville. (*South Med J* 70:153, Feb 1977.)

This study reports the psychologic findings in 30 patients undergoing this operation. Approximately one third developed postcardiotomy delirium, an occurrence consistent with that after other forms of open-heart surgery. Acceptance of the operation as opposed to preoperative anxiety, depression or denial, adequate comprehension of the proposed procedure, and a stable postoperative environment seem associated with less postcardiotomy delirium. Preventive preoperative therapeutic suggestions based on these findings are given.

Mammary Tuberculosis: A Rare Modern Disease

Robert W. Ikard, MD, and Denver Perkins, MD, Nashville. (*South Med J* 70:208, Feb 1977.)

Tuberculosis of the breast has become a rare disease since the advent of antituberculous chemotherapy. The incidence of tuberculous mastitis at Vanderbilt Hospital for the last two decades was 0.025% of surgically treated breast disease. This probably reflects its prevalence in economically developed parts of the world. The pathologic diagnosis of mammary tuberculosis may be difficult. The only diagnostic proof is the demonstration of tubercle bacilli by microscopic smear or culture. Numerous cases have been incorrectly reported as mammary tuberculosis because of nonadherence to this criterion. Definite guidelines for treating breast tuberculosis are not available and may never become so because of its rarity. Drug therapy has been successful and should be tried in all cases. Adequate surgical removal is inevitably corrective of the local disease. Surgically treated patients should receive antituberculous drugs before and after their operations.

Importance of the External Carotid Artery in Extracranial Cerebrovascular Occlusive Disease

Karl R. Clayson, MD, and William H. Edwards, MD, Nashville. (*South Med J* 70:904, Aug 1977.)

We have encountered 12 patients whose symptoms of transient ischemic attacks were due to total occlusion of the internal carotid artery with patency of the intracranial circulation being maintained by collateral circulation from the external carotid artery. In each case there was either tight stenosis or total occlusion at the origin of the external carotid artery. Eleven of the 12 patients were operated upon, receiving either thromboendarterectomy of the external carotid artery or a saphenous vein bypass to the patent distal portion of this artery. Ten of these 11 had complete or significant relief of symptoms. Although this condition represents only a small percentage of the total number of clinically significant extracranial occlusive lesions, studies suggest that the external carotid artery may be involved more commonly than previously suspected. Adequate radiographic visualization of the cerebral circulation is essential to evaluate the collateral pathways.

Management of Facial Fractures

David G. Bowers, Jr., MD, and John B. Lynch, MD, Nashville. (*South Med J* 70:910, Aug 1977.)

Maxillofacial fractures are usually diagnosed early by history, clinical findings, and standard roentgenograms. Emergency treatment centers around airway management; the conscious patient should be allowed to clear his own airway whenever possible. Treatment of lower and upper jaw fractures focuses on reducing the fragments so that dental occlusion is normal. Other midface fracture reductions require additional exact orbital rim alignment. Immobilization of fractures can require various combinations of intermaxillary fixation, interosseous wiring, suspensory wires from intraoral arch bars, transfacial Kirshner wires, occasional maxillary antral packs, and rare external fixation with headframes or external pins. Patients who may be comatose or seriously ill for several weeks should have a simple and safe compromise reduction and K-wire fixation done at bedside. Management of blow-out fractures of the orbital and frontal sinus fractures is somewhat controversial. Naso-orbital central facial fractures are especially difficult to maintain in proper reduction. Listed are possible late postoperative complications after treatment of facial fractures.

Cavernous Hemangioma of the Neck Simulating Thyroglossal Cyst

M.R. Mittapalli, MD, Masser Shahbazi, MD, and Alan R. Laurain, MD, Mountain Home. (*South Med J* 70: 1010, Aug 1977.)

A rare case of cavernous hemangioma simulating a thyroglossal duct cyst was reported. It is recommended that these be treated by total excision, including hyoid bone, to prevent recurrence.

Brain Tumors of Mixed Tissue Origin: Staining Procedures to Distinguish Glial from Connective Tissue

Martin G. Netsky, MD, Nashville. (*South Med J* 70:539, May 1977.)

Described is a unique mixed intracerebral tumor composed of schwannoma, piloid astrocytoma, and angiomatous malformation. Review of conventional staining methods for distinguishing glial from connective tissue fibrils reveals that Mallory's phosphotungstic acid-hematoxylin (PTAH) method is less specific than is generally recognized. Knowledge of these pitfalls, combined with use of hematoxylin and eosin stains, and reticulin impregnations are currently most useful in making the distinction by light microscopy. Criteria for malignancy of schwannoma and other mesenchymal tumors should be based on number of mitotic figures and invasiveness rather than on pleomorphism of cells. Prior knowledge of the location of the tumor may lead to diagnosing some schwannomas as other types of tumor.

Pulmonary Talcosis as a Result of Massive Aspiration of Baby Powder

Terry P. Cruthirds, MD, Francis H. Cole, MD, and Raphael N. Paul, MD, Memphis (*South Med J* 70:626, May 1977.)

Progressive diffuse pulmonary fibrosis as a sequel to massive aspiration of baby powder (talc) is documented. The diagnosis should be considered in "idiopathic" pulmonary fibrosis in childhood and adult life.

Clinical and Echocardiographic Manifestations of a Thrombosed Bjork-Shiley Aortic Valve

Lynda Tirao, MD, Loyda Tacogue, MD, William Alford, Jr., MD, and Rand T. Fredericksen, MD, Nashville. (*South Med J* 70:493, April 1977.)

A 36-year-old woman with a Bjork-Shiley prosthetic aortic valve developed acute congestive heart failure and pulmonary edema. She was found to have a new diastolic murmur, absence of valve clicks, and an immobile prosthetic disk as shown by echocardiography. At surgery the valve, which was covered with fibrin and thrombus, was replaced, and she did well following operation.

Gamma Heavy Chain Disease—Presenting as Pancytopenia and Splenomegaly

Angus S. Baker, MD, Paulette Lankford, PhD, Sanford B. Krantz, MD, and Richard D. Buchanan, MD, Nashville. (*South Med J* 70:495, April 1977.)

A patient with gamma heavy chain disease (Franklin's disease) was discovered during evaluation for pancytopenia and splenomegaly. Lymphadenopathy, palatal edema, and infiltration of the bone marrow with abnormal cells were all absent. Serum and urine protein electrophoresis demonstrated a monoclonal protein migrating in the beta region. Immunoelectrophoresis showed that it reacted with antibodies against the Fc fragments of IgG heavy chains (gamma chains) but not with antibodies against kappa and lambda light chains of Fab fragments. In the first year after detection of the disease, the patient had acute cholecystitis and disseminated herpes zoster. Sixteen months after diagnosis he died of overwhelming pneumonia caused by *Pseudomonas aeruginosa* and *Klebsiella pneumoniae*. A striking feature of his illness was his asymptomatic presentation, with pancytopenia and splenomegaly the only indication of this disease.

Intracranial Meningioma Containing Metastatic Foci

Thomas D. Weems, MD and J. H. Garcia, MD, Memphis. (*South Med J* 70:503, April 1977.)

A case of a woman with carcinoma of the lung who died as a result of an expanding fluid mass over the right cerebral hemisphere is presented. Adjacent to this fluid mass was a small meningioma containing a metastatic focus. This was one of the many metastases from the primary bronchiolar carcinoma. Photomicrography is presented and comments regarding tumor collision are given.

Is Postoperative Proximal Decompression a Necessary Complement to Elective Colon Resection?

Atef A. Ibrahim, MD, Daniel Abrego, MD, Isaac A. Issiah, MD, and D. W. Smith, MD, Nashville. (*South Med J* 70:1070, Sept 1977.)

Postoperative nasogastric suction is not a necessary complement to elective colon resection. We studied two groups of patients who had elective colon resection: nasogastric suction was used in the postoperative management of 53 patients, while 23 patients were managed without nasogastric suction. The morbidity and mortality rates were comparable in the two groups.

Hepatitis-B Surface Antigen (HB_sAg) and Antibody (Anti-HB_s) Prevalence Among Laboratory and Non-Laboratory Personnel

Lawrence D. Wruble, MD, Alfonse T. Masi, MD, DrPH, Michael L. Levinson, MD, Wilton A. Rightsell, PhD, George F. Bale, MD, Phillip Bertram, MD, and Carolyn F. Blackwell, MD, Memphis. (*South Med J* 70:1075, Sept 1977.)

HB_sAg and anti-HB_s positively was determined in hospital laboratory workers and nonlaboratory workers (controls) matched for race and sex and adjusted for age. The combined prevalence of antigen-antibody positivity among white female technicians was 12% versus 0 of control ($P < 0.005$). The highest prevalence (18%) among laboratory workers was found in chemistry technicians, and significantly elevated frequencies also were noted in histocytologic, hematologic, and general laboratory technicians and blood collectors; this was not explained by a history of previous blood transfusions or hepatitis. Prevalence among pathologists (16%) was significantly greater ($P < 0.05$) than among radiologists not routinely performing angiography (2%). Prevalence among black female housekeepers, both laboratory (25%) and nonlaboratory (36%), was the highest, and was significantly greater ($P < 0.05$) than among black female technicians (10%). Positivity was not correlated with current residence census tract socioeconomic indicators in black or white females. The data emphasizes the need for continued identification of risks and improved protection measures in hospital workers.

Surgical Repair of Old Fourth-Degree Perineal Lacerations

W. Byron Inmon, MD, and Stewart A. Fish, MD, Memphis. (*South Med J* 70:1080, Sept 1977.)

There are four basic surgical procedures for repair of old fourth-degree (complete) perineal lacerations: the layer closure, the Warren flap, the Bowers' modification of the usual layer closure, and the Noble procedure. The Noble procedure avoids the deficiencies of the other procedures, and it is recommended as the best choice for this type of repair because it produces an intact rectal tube uncompromised by a suture line, is anatomically correct, is simple and easily mastered, and apparently has a near-zero failure rate.

Massive Pulmonary Gangrene

Russell J. Proctor, MD, John P. Griffin, MD, and Charles E. Eastridge, MD, Memphis (*South Med J* 70:1144, Sept 1977.)

A 49-year-old man suffered massive necrosis of the lung subsequent to a pneumococcal lobar pneumonia. Development of massive hemoptysis required emergency lobectomy. The patient is doing well six months after surgery. Pulmonary gangrene is a rare but grave complication of lobar pneumonia. Both pneumococcal and *Klebsiella* pneumonias may progress to massive pulmonary gangrene despite antibiotic treatment. Survival seems to depend on the surgical removal of the necrotic tissue, which removes the danger of sudden massive hemoptysis.

Acetohexamide Hypoglycemia: Treatment by Peritoneal Dialysis

William D. Black, MD, Sergio R. Acchiardo, MD, Memphis. (*South Med J* 70:1240, Oct 1977.)

Acetohexamide hypoglycemia in a patient with renal failure has been successfully treated by peritoneal dialysis. Peritoneal dialysis was done in such a patient, and specimens of serum were collected to measure levels of acetohexamide and its main active metabolite, hydroxyhexamide. During dialysis, hypoglycemia was corrected. After 17.5 hours of dialysis, serum acetohexamide level was essentially unchanged. Serum hydroxyhexamide level had decreased at a slower rate than the rate of decrease previously noted in a uremic patient not on dialysis. Although peritoneal dialysis may correct the hypoglycemia, the data suggests that acetohexamide and hydroxyhexamide are not dialyzable. Due to these problems this drug should not be used in patients with chronic renal failure. The drug of choice to control hyperglycemia in patients with renal insufficiency is insulin. If for any reason insulin cannot be used, tolbutamide is the oral hypoglycemic agent of choice.

Septicemia Following Barium Enema

Joel L. Hammer, MD, Nashville. (*South Med J* 70:1361, Nov 1977.)

Reported is a case of septicemia following a barium enema. This is the fourth case reported. Several factors may predispose to septicemia, including host factors and technical factors related to the barium enema procedure itself.

Histiocytosis X: Abnormal Cerebrospinal Fluid Cytology in Extrahypothalamic Central Nervous System Involvement

J. Laurence Ransom, MD, Sharon B. Murphy,

MD, Memphis. (*South Med J* 70:1367, Nov 1977.)

The clinical course and long-term survival of a patient with acute disseminated histiocytosis X and extrahypothalamic CNS involvement were presented. The clinical significance of histiocytes appearing in the CSF concomitant with the onset of this neurologic syndrome was discussed. Detailed cytologic examination of the CSF in patients with histiocytosis X and CNS involvement was recommended.

Hypothyroidism and Hypocalcemia: Report of a Case With a Parathyroid Adenoma and Review of Literature

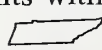
Thomas C. Jones, MD, Jackson J. Yium, MD, Chattanooga. (*South Med J* 70:1375, Nov 1977.)

A woman with hyperthyroidism and hypocalcemia and a parathyroid adenoma is described. Various studies indicate that in hypothyroid subjects given an acute dose of calcium, the serum calcium levels remain elevated for longer periods than in control subjects. In part, this may be due to diminished bone uptake. Despite these studies which would tend to support the contention that hypothyroid patients "have a propensity to hypercalcemia" (Lowe et al), overt and significant hypercalcemia is unusual.

Hypothyroidism is listed as a possible cause of hypercalcemia. This does not seem to be warranted by a review of the literature. The reference most often cited is that of Lowe et al. In their particular case, the hypercalcemia improved with thyroid replacement therapy. This also happened in our case. However, the measurement of IPTH levels led to the correct diagnosis. IPTH levels were not available at the time of Lowe's report and hyperparathyroidism was not completely excluded. Therefore, at this time, the reported association of hypercalcemia with adult hypothyroidism needs further examination to determine if this association is real.

Anesthetic Management of Patients With Epidermolysis Bullosa

Charles H. Hubbert, MD, John G. Adams, MD, Memphis. (*South Med J* 70:1375, Nov 1977.)

Presented is a 12-year-old girl with epidermolysis bullosa who required anesthesia for extensive dental rehabilitation. Patients with epidermolysis bullosa can be given anesthesia with minimal complications if the preoperative evaluation is complete, the selection of anesthesia is appropriate, and certain procedures which cannot be safely used in patients with this disease are conscientiously avoided. 

TENNESSEE MEDICAL ASSOCIATION
143RD ANNUAL MEETING
April 12-15, 1978
Hyatt Regency, Knoxville, Tennessee

The continuing medical education accreditation program of the TMA has full approval by the Liaison Committee on Continuing Medical Education. An accredited institution or organization may designate for Category 1 credit toward the AMA Physician's Recognition Award those CME activities that meet appropriate guidelines. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Ave., Nashville, TN 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

IN TENNESSEE

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman, can plan an individualized program of one to four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, ward rounds, learning individual procedures, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

Participating Departments and Divisions

Allergy & Immunology	Samuel Marney, M.D.
Anesthesiology	Bradley E. Smith, M.D.
Cardiology	Gottlieb C. Friesinger, III, M.D.
Chest Diseases	James D. Snell, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Dermatology	Lloyd King, M.D.
Diabetes	Oscar B. Crofford, M.D.
Endocrinology	David Rabin, M.D.
	David N. Orth, M.D.
Gastroenterology	Steven Schenker, M.D.
General Internal Medicine	W. Anderson Spickard, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.
Medicine	Grant W. Liddle, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Oncology	Robert Oldham, M.D.
Orthopedics	Paul W. Griffin, M.D.

Pathology	William H. Hartmann, M.D.
Pediatrics	David T. Karzon, M.D.
Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Everette James, Jr., Sc.M., J.D., M.D.
Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sergent, M.D.
Surgery	
Cancer Chemotherapy	Vernon H. Reynolds, M.D.
General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neill, M.D.
Plastic	John B. Lynch, M.D.
Renal Transplantation	Robert E. Richie, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.

Eligibility: All licensed physicians are eligible.

Administrative Fee: \$200.00 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1) and American Academy of Family Physician's Continuing Education accreditation.

Application: For further information and application, contact: Paul E. Slaton, M.D., Director, Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

Continuing Education Schedule 1978

Jan. 27	Annual L. W. Edwards Memorial Lecture (1 hour)
March 5-10	Radiology Update 1978 (23 hours)
March 17-18	Annual Meeting, Southern Society of Physical Medicine and Rehabilitation
March 22-24	Clinical Endocrinology: Update 1978 (20 hours)
March 27	7th Annual James C. Overall Visiting Lectureship—Pediatric Pulmonary
April 19-21	Legal Aspects of Radiology (co-sponsored by School of Law)
April 21	Annual Barney Brooks Lectureship in Surgery (1 hour)
April 22	Annual Scott Surgical Society Lectureship
April 27	Annual Frank E. Luton Lecture in Psychiatry (1 hour)
April 28-29	Symposium on Clinical Gynecology
Spring, 1978	Update in Management of Urologic Malignancies—Annual Cancer Symposium (12 hours)
May 18-19	17th Annual Seminar in Psychiatry (for nonpsychiatrists)
May, 1978	Postgraduate Course in Allergy
May, 1978	Scientific Sessions of the Vanderbilt Medical Alumni Reunion (6 hours)

July 6-9 Contemporary Clinical Neurology,
Hilton Head, S.C. (16 hours)

For information contact: Vanderbilt Continuing
Education, 305 Medical Arts Building, Nashville,
TN 37212, Tel. (615) 322-2716.

UNIVERSITY OF TENNESSEE CLINICAL EDUCATION CENTER

Chattanooga

Continuing Education Schedule 1978

- Mar. 2-3 Clinical Orthopedics—Chattanooga
Mar. 20-23 Diagnostic Radiology for Emergency &
Family Physicians—Lake Tahoe, NV
Mar. 21 Respiratory Infections—McMinn-
Monroe County Medical Society
Apr. 14-15 Pediatric Course—Chattanooga
Apr. 18 Postsurgical Infections—McMinn-
Monroe County Medical Society
May 4-6 Basic Cardiology—EKGs & Therapy
for the Primary Care Physician—
Chattanooga
May 16 Helminthic & Parasitic Infections Re-
quiring Intermediate Hosts—McMinn-
Monroe County Medical Society
June 14-20 OB/GYN Course—Humacao, Puerto
Rico

For information contact: LeRoy J. Pickles, Direc-
tor, Continuing Medical Education, Suite 400, 921
E. 3rd St., Chattanooga, TN 37403, Tel. (615)
756-3370.

UNIVERSITY OF TENNESSEE CENTER FOR THE HEALTH SCIENCES Memphis Unit

- Feb. 9-10 Gynecologic Urology—Hilton Inn:
Memphis Airport, Memphis
March 13-15 The Infertile Female: Practical
Aspects of Diagnosis and Manage-
ment—Holiday Inn-Rivermont, Mem-
phis. *Credit:* 20 hours AAFP elective
and 25 cognates ACOG. *Fee:* prac-
ticing physicians, \$175; physicians in
training, \$100.

For information contact: Division of Continuing
Education, TCHS, 800 Madison Ave., Memphis, TN
38163, Tel. (901) 528-5547.

EAST TENNESSEE CHILDREN'S HOSPITAL

- April 18-19 A Day and One Half of Practical
Pediatrics
May 2-3 Pediatric Infectious Diseases

For information contact: Karen Lee Shields,
Committee on Continuing Medical Education, East
Tennessee Children's Hospital, 2018 Clinch Ave.,
Knoxville, TN 37916.

IN SURROUNDING STATES

UNIVERSITY OF KENTUCKY

Mini-Residencies for Medical and Surgical Practitioners in Office Management Of Emotional Problems

The objective of this course is to give physicians
an ideal emotional counseling technique that fits
busy office practices. The technique uses a concept
of emotions that is consistent with human anatomy
and psycho-physiology. Yet, the technique requires
no more physician time or patient cost than routine
evaluations of new patients. Finally, the technique is
readily understandable and easy for practitioners to
apply.

One, two and three week courses. Minimum of
40 hours per week. *Tuition Fee:* \$350 per week for
the 1st & 2nd week of training; \$500 for 3rd week
of supervised practice with patients in the Intensive
RBT Treatment Program.

For further information contact: Maxie C.
Maultsby, Jr., M.D., Office of Continuing Medical
Education, Dept. of RBT, University of Kentucky,
Lexington, KY 40506.

Continuing Education Schedule 1978

- Feb. 3-4 Burn Symposium—Hyatt Regency
Lexington, Lexington, Ky. *Credit:* 9
hours AMA Category 1. *Fee:* physi-
cians, \$75; nurses and physical ther-
apists, \$35.
Feb. 19-24 Eighth Family Medicine Review: Ses-
sion III—Hyatt Regency Lexington,
Lexington, Ky. *Credit:* 50 hours AMA
Category 1 and AAFP. *Fee:* \$295.
April 14-15 Diabetes Control: Why and How—
Hyatt Regency Lexington, Lexington,
Ky. *Credit:* 9 hours AMA Category
1. *Fee:* \$75.
April 18-25 Controversies in Care (Obstetrics &
Gynecology)—Location: Maui, Ha-
waii (leaving from Cincinnati, Ohio).
Credit: 30 hours AMA Category 1.
Fee: \$850.
May 4-5 Medical and Behavioral Problems in
Older Persons—Hyatt Regency Lex-
ington, Lexington, Ky. *Credit:* 12
hours AMA Category 1. *Fee:* \$80.
May 17-19 Surgical Diseases in Children: Radio-
logic Evaluation and Operative Cor-
relation—Hyatt Regency Lexington,
Lexington, Ky. *Credit:* 15 hours AMA
Category 1. *Fee:* physicians, \$180;
residents, \$90.

For information contact: Frank R. Lemon, M.D.,
Continuing Education, College of Medicine, Uni-
versity of Kentucky, Lexington, KY 40506.

UNIVERSITY OF LOUISVILLE

Feb. 24-25 4th International Symposium on Psychopharmacology—Health Sciences Center, Louisville.

For information contact Herman C. B. Denber, M.D., Ph.D., P.O. Box 35260, Louisville, KY 40232.

UNIVERSITY OF MISSISSIPPI

March 9-11 Surgical Forum V—Holiday Inn Downtown, Jackson, Miss.

For information contact: Continuing Education, University of Mississippi Medical Center, 2500 N. State St., Jackson, MS 39216.

MEDICAL COLLEGE OF GEORGIA

Feb. 7 Pediatrics

Mar. 7 Metabolic Diseases

Mar. 7-10 Emergency Medicine: The First 90 Minutes—Tamarron Resort, Durango, Colo. *Credit:* 15 hours AMA Category 1; AAFP pending. *Fee:* \$150.

Apr. 4 Gastroenterology

May 2 Orthopedics and Pathology

For information contact: Division of Continuing Education, Medical College of Georgia, Augusta, GA 30901.

BOWMAN GRAY SCHOOL OF MEDICINE

Courses in Ultrasound

Two eight-week postgraduate courses in sonic medicine at Bowman Gray School of Medicine will be offered on the following dates: Jan. 9-March 3 and April 3-May 26, 1978. *Credit:* 30 hours per week in AMA Category 1. Two additional two-day real time courses are offered for obstetricians on March 9-10 and June 1-2, 1978. *Credit:* 10 hours per day in AMA Category 1.

For information contact: James F. Martin, M.D., Director, Center for Ultrasound, Bowman Gray School of Medicine, Winston-Salem, NC 27103.

DUKE UNIVERSITY MEDICAL CENTER

6th Annual Radiology Tutorial

April 3-7 The Radiology of Neoplastic Diseases—Duke University, Durham, N.C. *Credit:* 27 hours AMA Category 1.

For information contact: Robert McLelland, M.D., Radiology—Box 3808, Duke University Medical Center, Durham, NC 27710, Tel. (919) 684-4397.

OF SPECIAL INTEREST

NEW ORLEANS GRADUATE MEDICAL ASSEMBLY

March 31-April 4 The High Risk Patient—The Fairmont, New Orleans. *Credit:* AMA Category 1, AAFP, ACEP. *Fee:* non-member physicians, \$200; military or registered nurses, \$100; students, residents, interns and Fellows, no charge.

For information contact: New Orleans Graduate Medical Assembly, Room 1538, Tulane Medical Center, 1430 Tulane Ave., New Orleans, LA 70112, Tel. (504) 525-9930.

AMERICAN COLLEGE OF RADIOLOGY

Breast Cancer Conference

March 6-9 17th Annual National Conference on the Detection and Treatment of Breast Cancer—San Francisco. *Credit:* 29 hours AMA Category 1; 18 cognates ACOG plus 2 cognates each workshop.

For information contact: Breast Cancer Conference, ACR, 6900 Wisconsin Ave., Chevy Chase, MD 20015.

AMERICAN INSTITUTE OF ULTRASOUND IN MEDICINE, INC.

April 2-9 4th Annual Spring Educational Meeting—San Juan, Puerto Rico. *Fee:* AIUM and ASUTS members, \$190; nonmembers, \$240; residents, fellows, students, \$150.

For information contact: AIUM/Puerto Rico '78, AIUM Executive Office, 6161 N. May Ave., Suite 260, Oklahoma City, OK 73112, Tel. (405) 840-3723.

WEST VIRGINIA CHAPTER—AAFP

April 7-9 26th Annual Scientific Assembly—Holiday Inn Charleston House, Charleston, W. Va. *Credit:* 17 hours.

For information contact: William B. Ferrell, Jr., Executive Secretary, West Virginia Chapter American Academy of Family Physicians, Route 4-Box 22A, Charleston, WV 25312, Tel. (304) 776-1178.

U.S. VIRGIN ISLANDS MEDICAL SOCIETY

Jan. 26-28 Third Mid-Winter Virgin Islands Clinical Conference (in association with faculty of Johns Hopkins University School of Medicine)—Bluebeards Castle Hotel, St. Thomas, V.I. *Credit:* 14 hours AMA Category 1.

For information contact: Peter A. Curreri, M.D., Third Annual Clinical Conference, Box 39, Red Hook, St. Thomas, V.I. 00801.

AMERICAN COLLEGE OF PHYSICIANS

A comprehensive schedule of continuing medical education activities for a 12-month period beginning in August, 1977, includes regional meetings and postgraduate courses to be held at various locations throughout the United States and Canada.

The ACP Regional Meetings, lasting one to four days, are designed for practicing internists and physicians in related fields. They bring new developments in the basic sciences and clinical medicine from major research centers to internists who are unable to travel to medical meetings outside of their state, and also provide a vehicle for local physicians to report to their colleagues on investigative work and clinical experiences in the wide scope of subject areas included in the practice of internal medicine.

The ACP Postgraduate Courses provide the opportunity for in-depth study in fields covered by internal medicine and its subspecialties. Averaging three to five days, they are directed toward practicing physicians and are presented in association with medical schools and other teaching institutions.

For information and registration contact: Registrar, Postgraduate Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

Regional Meetings

See September 1977 issue for complete 1977-1978 listing

Postgraduate Courses

See September 1977 issue for complete 1977-1978 listing

Feb. 27- Mar. 3 4th Stanford-Palo Alto Medical Research Foundation Winter Course in Infectious Diseases at Sun Valley—Sun Valley, Idaho

Feb. 28- Mar. 2 Clinical Oncology for the General Internist—Denver

Mar. 1-3 Practice Management of Pulmonary Diseases—Temple, Tex.

Mar. 6-8 Diagnosis, Treatment and Prevention of Genetic Disease—Palm Springs, Cal.

Mar. 6-8 Recent Advances in Neuro-Endocrinology—Montreal

Mar. 20-22 Recent Advances in Internal Medicine—Galveston, Tex.

Mar. 20-24 Current Concepts in Renal Disease and Electrolyte Disorders—New Haven, Conn.

Mar. 22-24 Clinical Endocrinology—Nashville, Tenn.

Mar. 23-25 Clinical Recognition and Management of Heart Disease—Tucson, Ariz.

Mar. 29-31 Diagnostic and Therapeutic Advances in Gastroenterology—Rochester, Minn.

ST. FRANCIS HOSPITAL MIAMI BEACH, FLORIDA

Pediatric Dermatology Seminar & Cruise

Feb. 23-26 Pediatric Dermatology Seminar—Konover Hotel, Miami Beach. *Credit:* 12 hours AMA Category 1 and AAD, AAFP prescribed. *Fee:* physicians, \$150; in training, \$100.

Feb. 26- March 5 Post Convention Flight-Cruise to South America and the Caribbean. *Credit:* 12 hours AMA Category 1 and AAFP, AAD prescribed. *Fee:* \$795.

For information contact: Guinter Kahn, M.D., 16800 N.W. 2nd Ave., Suite 401, N. Miami Beach, FL 33169.

AMERICAN SOCIETY OF CONTEMPORARY MEDICINE AND SURGERY

Jan. 30- Feb. 4 13th Annual Scientific Assembly—Americana Hotel, Miami Beach. *Credit:* 40 hours AMA Category 1.

For information contact: John G. Bellows, M.D., Ph.D., Director, 6 N. Michigan Ave., Chicago, IL 60602, Tel. (312) 236-4673.

BETH ISRAEL HOSPITAL DENVER, COLORADO

See August 1977 issue for listing

Evidence Lacking That Pets Transmit Multiple Sclerosis

There is no firm evidence that house pets—small dogs and cats—are associated with multiple sclerosis in their owners, says a communication in the Nov. 21 issue of *JAMA*. Multiple sclerosis is not a contagious disease.

A *JAMA* report last August indicated an apparent relationship between prolonged and close contact with house pets and the subsequent development of multiple sclerosis. It confirmed a study earlier this year in *Lancet*, which also found a relationship between pets and the disease.

To clear the air regarding multiple sclerosis and exposure to house pets, it should be pointed out that distemper in dogs is comparable to measles in human beings. The two viruses cause similar clinical illnesses in their respective hosts. Distemper and measles are related. Bodily changes in dogs with chronic distemper are similar to findings in human patients with multiple sclerosis.

There is no firm evidence that human beings get distemper or measles from dogs. Likewise, dogs do not get measles from humans or from being inoculated with live measles virus.

Lancet also published a further communication on the subject on Oct. 15, from a virology research group in India. These individuals are not sure whether there is a relationship between pets and the disease.

An alternative possibility (to acquiring multiple sclerosis from pets) is that pet owners get infected with dog and cat nematodes and that this infection plays a part in the causation of multiple sclerosis.

New Drug Treatment Relieves Diabetes Pains

Sometimes diabetes causes severe pains in the legs and arms. The pains can be so acute that the sufferer is unable to function and even may become a drug addict from taking quantities of strong pain medications. A new drug treatment that relieves these pains is reported in the Nov. 21 issue of *JAMA*.

The treatment was with two drugs: fluphenazine hydrochloride and amitriptyline hydrochloride. They were used separately and in combination, and the pain was relieved in all eight of the individuals. Fluphenazine hydrochloride carries the trade name of Prolixin. Amitriptyline is known as Flavil.

AMA Sets Medical Standards For Jails

For the first time in the nation's history, a national effort is being made to ensure that prisoners in American jails will not suffer the cruel and unusual punishment of inadequate health care. The AMA announced recently that it has formulated a set of minimum standards for health care services in American jails. (Jails are defined as metropolitan or county-operated installations which hold inmates for trial and/or limited terms of punishment.)

The standards, consisting of 83 separate items of health care capability, have been approved by the AMA National Advisory Committee on Health Care in Jails. The committee is composed of physicians, sociologists, ex-offenders, clergymen, sheriffs, and others interested in jail reform. The National Sheriffs' Association and the American Correctional Association have also approved the standards.

Six state medical societies are participating in the program, working with 30 pilot jails for the gathering of data and the testing of preliminary standards. Experimental medical care delivery systems have been installed in certain jails with the expectation that some of the systems will be transferable to other jails. The program began in December, 1975, and is expected to be completed in another year.

The ultimate objective of the program is the collection of data for the development of a national certification system for jail medical programs, using approaches similar to those applied to the certification of hospitals and medical schools.

Bladder Cancer Responds To New Drug Treatment

A new treatment with a combination of three different drugs that has proved effective against metastatic bladder cancer—an often fatal ailment—is reported in the Nov. 21 issue of *JAMA*. Of the 29,800 new cases of bladder cancer that were diagnosed in 1976 in the United States, 9,500 people died. Heretofore drug treatments for bladder cancer had been discouraging.

The patients were treated with a combination drug program consisting of cisplatin, cyclophosphamide, and doxorubicin hydrochloride. The combination is called CISCA. Of the ten patients in which response to therapy could be measured, nine got better, including one complete response and eight partial responses. CISCA combination chemotherapy has given the highest response rate of any protocol thus far tested in advanced metastatic urinary tract carcinoma. It is still too early to know the long-term effect of the treatment.

Millions Suffer Pill Swallowing Difficulties

A research paper published in the *Lancet* reveals that *everyone*, at one time or another, has experienced the unpleasant sensation of a pill being "caught" in the throat. In fact, tablets no larger than aspirin can remain stuck in the throat for as long as 90 minutes after they are swallowed—*unknown to the person who has taken them*.

The choking reflex is a natural one, designed to prevent death by suffocation. New statistics from the National Safety Council show that in 1976 choking to death was the sixth most common cause of accidental death in the United States.

Apex Medical Supply, Inc. now offers a product which assures dramatic relief to millions of people who have difficulty swallowing pills because of the choking/gagging reflex. It is ideal for adults as well as children. After partially filling the specially designed plastic glass, the pill is merely placed on the convenient shelf built into the glass. The user simply drinks as he always would, and the pill is washed down his throat on a wave of water with absolutely no problem. Drink-A-Pill is available in a variety of attractive colors, is completely dishwasher safe, chemically inert and easy to sanitize.

For further information, write Apex Medical Supply, Inc., 9701 Penn Ave., South, Bloomington, MN 55431.

Selenium in Yeast Tablets Called Potential Danger

Yeast tablets containing selenium, on sale at some health food stores, are potentially dangerous and should be avoided, says a communication in the Nov. 21 issue of *JAMA*.

Selenium is a trace element that is found in nature and in man, particularly in teeth, and in most body tissues. It comes from cereals and also meat, poultry, fish and dairy products. In normal amounts it is harmless, possibly useful. Much of the selenium consumed is excreted in the urine.

But in overdose, selenium can be very harmful—even fatal—to animals and very likely is harmful to humans. In animals selenium poisoning causes blindness, colic, muscle paralysis and death from respiratory failure.

The selenium-containing yeast tablets were offered as a cure for dandruff in the health food store. But there is no evidence that it works.

Spinal Injuries Dangerous To Football Players

The young linebacker smashes through the

blockers and drives his lowered head into the ball carrier's churning knees to make the tackle. The crowds cheer the defensive play and the linebacker gets to his feet, apparently unhurt. But he immediately complains of a sharp, burning sensation in his hands and fingers. Coaches, trainers and team physicians are alerted that this burning sensation just might be the only apparent symptom of a spinal cord injury. Not always is there neck pain and paralysis from spinal cord injuries in football.

From 1931 to 1975 there were at least 819 deaths directly related to football participation. Injury to the brain and spinal cord accounted for almost 80% of these deaths. In addition, an unknown number of football players each season are paralyzed for life from spinal injuries, possibly as frequently as one to each 28,000 participants.

It is imperative that any athlete with complaints of burning hands be treated as if a spinal fracture were present. On the field, the football helmet should not be removed, but rather used for support of the neck. The face mask can be cut away if necessary to get to the face. Transportation by stretcher or a flat board with at least four persons lifting is essential.

Prevention of spinal cord injuries should be stressed by the team physician. Coaches must be urged to teach proper blocking and tackling, and to eliminate "goring and spearing." Strengthening and development of the head and neck muscles, particularly in long, slender-necked athletes, should be a prerequisite for football participation. Safe equipment must be provided and properly used.

It is the responsibility of physicians to instruct all those involved with athletics in the earliest symptoms and signs of spinal cord injuries to prevent that "second accident" which occurs from improper movement of a patient following a cervical cord injury.

Oral Contraceptives Linked to Liver Tumors

An association between use of oral contraceptives and liver tumors is confirmed in a report in the Nov. 14 issue of *JAMA*.

The American College of Surgeons' Commission on Cancer reports on a five-year study of liver tumors, both malignant and benign, in almost 500 hospitals across the nation. Some 543 primary liver tumors were discovered, and a history of oral contraceptive use was found in nearly half of them. Also, tumor symptoms were more severe among users.

While liver tumors are infrequent they are less rare among young women than had previously been thought. Many patients have vague, nonspecific complaints, and there is a special need for awareness on the part of doctors.

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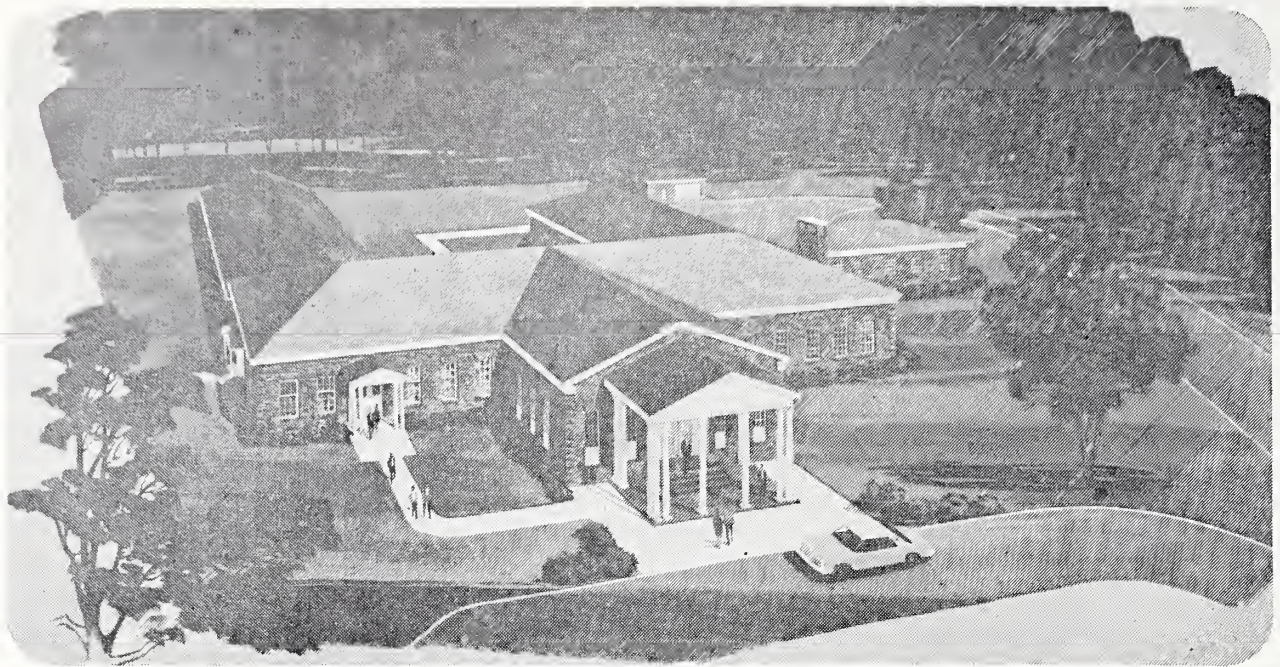
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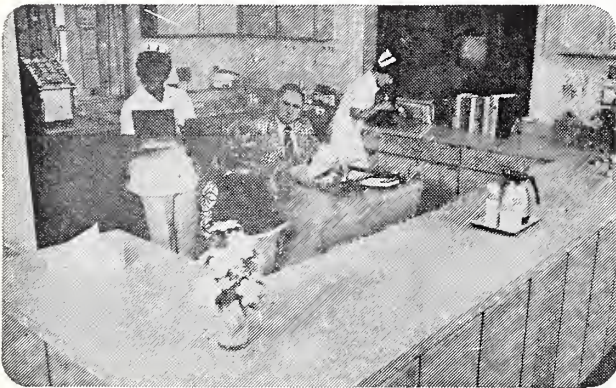
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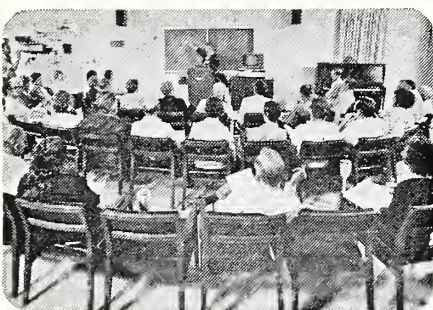
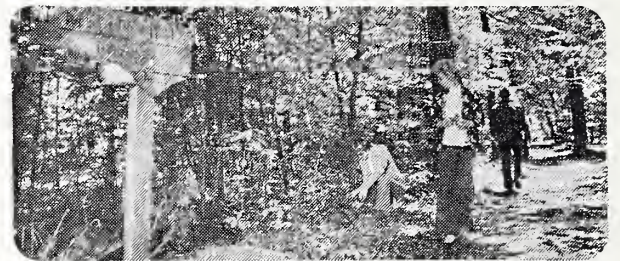
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Coronary Artery Bypass: Is It Worth It?

JAMES W. PATE, M.D.

Many thousands of patients in the United States underwent coronary artery bypass in 1976, and the rate is increasing towards a potential 10,000 per month. The cost of this level of coronary artery bypass surgery will probably be about \$1.5 billion per year. This yearly figure approximates the total cost of building *all* the major hospitals in Tennessee. It approximates about one fourth of *all* physician payments under the Medicare program for 1976. Is it worth it?

At a recent social gathering, I was told the following story by a plump, 36-year-old office worker, who was holding a cigarette, a martini, and a stuffed egg: "I was skiing, and felt sudden onset of mid-chest pain, which went away upon resting. The next day, it happened again, and I returned home and saw my doctor on Monday. A treadmill showed cardiogram changes, and I was admitted to the hospital. I had cardiac catheterization on Wednesday, and they found blocks in my coronary arteries. I was operated upon on Friday. I am now (two months later) okay, and feel great! Thank goodness they found it before I had a heart attack." Obviously, this patient's concept of his disease was that the evil spirits had been exorcised by dramatic surgery. What is the real status of coronary artery bypass surgery in 1977?

Coronary artery bypass consists of a graft, either artery or vein, from the aorta to a coronary artery distal to a site of an obstruction usually caused by atherosclerosis. The procedure was

introduced in the late 1960s, and became "routine" about 1970. It is a simple procedure, done safely by teams who are inexperienced in the complex surgery of congenital or adult valvular heart disease, with a surgical mortality of 1% to 5%. Complications are few, and most grafts (70%-94%) remain patent.¹⁻⁵ Even when grafts become occluded by clot or stenosis, or appear to be occluded due to radiographic artifacts, the patients are usually well pleased with the results (70%-85%).

The original and the major indication for coronary artery bypass is *angina pectoris*. Two major subgroups of patients who apparently benefit from surgery can be identified—those with "preinfarction" or "unstable" angina, and those with incapacitating "stable" angina. There are varying forms other than these two, but these serve to illustrate the best-defined results of surgical intervention.

"Preinfarction," unstable angina is severe, unremitting pain, or progressively more frequent pain, unresponsive to medical treatment, but not associated with enzyme or electrocardiographic evidence of acute infarction. These patients frequently progress to infarction, and many die within a few months. Surgery improves the prognosis.⁶

"Stable" angina patients are those with longstanding angina with no, or slow, change in severity or frequency of attacks. When symptoms are "intractable," "incapacitating," or "intolerable" to a particular patient and his acceptable lifestyle, he is an ideal candidate for surgery. Cessation of smoking, return to lean weight, control of hypertension and diabetes, and propranolol therapy should be required before surgery is recommended. In such patients, who have angiographically demonstrated arterial stenosis of over 70% of diameter, particularly in the proximal two thirds

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This paper represents opinions based upon experience in the above hospitals, and survey of and familiarity with studies done elsewhere; only the author is responsible for them.

of two or more vessels, surgery will usually be safe and lead to a high degree of amelioration of pain. Angina disappears, or occurs much less frequently, or with less severity, in over 70% of such patients. Exercise tolerance and ability to carry on physical activities are usually markedly improved. "Quality of life" is dramatically affected.

Relief of pain, increased exercise tolerance, and the improvement of the quality of life involve some *subjective* judgment by the patient. Let us consider more objective end-points, such as survival, myocardial function, and prevention of infarction.

Survival

Hammermeister⁷ compared 400 patients treated medically and followed for 0-72 months, with 1,205 similar patients operated upon with about the same follow-up. With single-vessel disease, there was no statistical difference in mortality rates. With two-vessel disease, there was statistically significant improved survival in surgical patients. In three-vessel disease, the surgical patients appeared to do better, but statistical significance was questionable. In medically treated patients, the mortality from sudden death was 12.5%, as opposed to 2.2% for patients treated surgically. In some subsets of patients, sudden death occurred more than ten times more often in medically treated patients.

The V. A. Randomized Cooperative Study has included 1,015 patients, with data on the last 686 patients (excluding left main coronary lesions) available.⁸ In these patients, with angina for over six months and acceptable left ventricular function, 69% of the grafts are patent on restudy, and 89% of patients have one or more grafts open. Including the operative mortality of 5%, there is no statistically significant difference in mortality between the medically and surgically treated groups (86% and 87% survivors at 25-36 months).

While the published reports vary widely, and controlled randomized studies are still inadequate, the best consensus at this time seems to be that in patients with reasonable left ventricular function, two or more vessel obstructions of over 75%, and angina for more than six months, there is somewhat better survival among the surgically treated patients.^{1,9}

Our experience reveals that most patients with disability marked by signs and symptoms of low ventricular output will show improvement in physical exercise tolerance and decreased symptoms after coronary artery bypass surgery.

Manley's published report¹⁰ of 252 patients with *severe* left ventricular malfunction reveals that both survival and quality of life are improved by surgery. The six-year survival rate was better than in patients treated medically. As many grafts were patent and angina was relieved as often as in patients with good ventricular function.

Most studies reveal an increased operative mortality in patients with poor left ventricular function, especially when the ejection fraction is less than 0.25, but increased use of the intra-aortic balloon assist device and better methods of myocardial protection are lowering this risk. Our last few patients with ejection fractions from 0.19 to 0.35 have done well with balloon assist for the first few days after surgery.

Santos' recent publication¹¹ of 116 patients followed for about six months after surgery revealed that in those patients with low left ventricular output and high left ventricular end-diastolic pressure, there was usually a clear trend towards improvement after surgery, even when one or more of the grafts became occluded.

Steele¹² reported this year, a series of 97 patients with ejection fractions of less than 0.25, followed for up to 30 months. Fifty were treated with coronary artery bypass, and 47 were treated medically. The balloon assist device was used in 24% of the operated patients. Of the surgical group, two died early and 15 late (18 months, mean).

It appears, therefore, that poor left ventricular function in a patient with angina, while increasing the risk of operation, is associated with clear evidence of improved long-term course.¹²⁻¹⁴

In patients in frank heart failure, usually from generalized ventricular scarring, operative mortality is high, and long-term results are very poor.

Prevention of Infarction

In the University of Tennessee series of 483 patients, followed for up to 73 months, about 2% of the patients have infarctions *each year* after surgery. Unfortunately, we have no control patients for comparison. The diagnosis of infarction is particularly difficult in the immediate postoperative period, since enzymes may be elevated and

EKG changes may occur as the result of surgery itself.¹⁵ We consider the development of new Q waves significant, although it has been shown that these may disappear spontaneously.

Review of some data from the literature on the incidence of infarction in patients with angiographically proven coronary disease indicates that the incidence is somewhere between 4% and 15% per year in patients with angina treated medically, as compared to about 1% to 8% per year in those operated upon. While it must be emphasized that these data are not comparable and are subject to much error, it does seem that surgery in patients with two or more vessels involved may decrease the likelihood of subsequent infarction.^{5,9,16} Certainly, however, we cannot assure a patient that surgery will "prevent another heart attack." This attitude remains to be proven.

Special Cases

Patients with a significant obstruction to the left main coronary artery have been shown to have a high incidence of major infarction and/or death. Most studies indicate a clear effect of coronary artery bypass surgery in preventing the probability of this occurrence.^{17,18} Patients with physiologically equivalent lesions, involving both the left anterior descending (LAD) (high) and circumflex arteries, are subject to the same phenomenon. In this instance, therefore, one seems justified at this time in recommending surgery because of angiographic findings, regardless of the patient's symptoms or functional impairment.

Coronary insufficiency has been one of the major causes of death or poor result following replacement of the aortic valve. These poor results can be markedly improved when "incidental" coronary artery bypass grafts are added to the operative procedure. The same principle seems to apply in patients whose surgery is for some other form of heart disease, such as mitral valve replacement, or aneurysmectomy of ventricle or aorta.

A patient with acute infarction has been shown to be *no candidate* for coronary artery bypass using present techniques. Mortality is prohibitive, and even in survivors there is little evidence of a favorable surgical effect.

Uncontrolled arrhythmia may be favorably influenced by coronary artery bypass, particularly when surgery is indicated by "preinfarction" status, ventricular aneurysm, or very high LAD lesion, with patent perforator branches. However, arrhythmia alone is not usually considered a valid

TABLE 1
PROBABLE EFFECTS OF AORTOCORONARY BYPASS SURGERY, 1977

Status of Patient	Symptoms Improved	Future Infarction	Survival
Preinfarction angina	++++	+++	++
Left main lesions	+++	+++	++
Stabile, intolerable angina	++++	+ (?)	+
Poor ventricle and angina	++	?	?
Heart failure	?	?	?

reason for recommending coronary artery bypass surgery.

Of particular concern is the patient who has had a recent single infarction, and who has no angina. When these patients are studied and found to have major occlusions of two or more coronary arteries, the urge to recommend surgery in order to preserve functioning myocardium becomes strong. While there is some evidence that surgery may decrease probability of further infarction and death, the data are not "firm" at this time. Our present policy in such a case is to correlate angiography with treadmill performance and overall clinical status, including age and work requirements, before a tentative recommendation for coronary artery bypass is given. Even then, the patient should participate in the decision, after being told the facts and the evidence, as we now know these factors.

Summary of the available data lead me to believe, *at this time*, the following (Table 1):

- In preinfarction angina patients, operation improves symptoms and probably prolongs life.¹⁹

- "Stabile, intolerable" angina pectoris is usually ameliorated by surgery.^{20,21}

- Survival in angina patients with two or more vessels having major proximal obstructions, and open distant beds, may be improved by surgery.

- Abnormal myocardial function in patients with angina, and not in frank heart failure, frequently is improved by coronary artery bypass surgery.

- In patients with two or more vessels obstructed, there may be a statistical decrease in likelihood of future infarction.

- In patients with left main artery, or equivalent, obstructions, surgery seems to decrease the probability of subsequent infarction and/or death.

- When heart surgery is indicated for other reasons (e.g., aortic valve replacement), coron-

CORONARY BYPASS/Pate

ary artery bypass increases the survival rates.

● Other "facts" pertaining to benefits of coronary artery bypass are more questionable at this time.


Is it Worth It?

This question implies some material, or dollar, value judgment. Since coronary artery disease is the leading cause of death in the most productive segment of American society, the question becomes very important.

Table 2 illustrates some of the impact of coronary artery bypass on medical economics. This volume of work is reasonable for *one* cardiac surgeon. The effect on a hospital with several such surgeons is obvious. Even a few patients operated upon for nonvalid indications can have a major fiscal influence. In this day of third-party payment (which is really a "cost-plus" system), the surgeon is joined by other specialists, administrators, and hospital boards in his (unconscious ?) desire for "more cases." We must be careful not to allow such considerations to affect our objectivity and judgment.

However, if only a conservative 20% of additional patients are returned to productive endeavors by surgery, then society may be saved as much as 25% of this amount *each additional year* the patient works. Unfortunately, our experience, in common with that of others, indicates that previously disabled or retired patients do not usually return to work after surgery. Therefore, for dollar-cost-benefit improvement, major emphasis will need to be directed toward physical and occupational rehabilitation. The internists and surgeons will need to direct these efforts to overcome the powerful socioeconomic factors, and "overprotectionist" attitudes, which now discourage return to work. The value of physical

activity, such as hunting, fishing, or making love, is harder to quantitate; maybe this quantitation will be best left to our patients.

The extreme cost doesn't make it wrong; compare these costs to America's expenditures for gambling, tobacco, alcohol, "Baptist cocktails" (tranquilizers), golf, fishing, or music. The high income of the cardiac surgeon is not immoral; compare it with the incomes of country-music singers, professional athletes, and entertainers. What is the "worth" of coronary artery bypass? When carried out in properly selected cases, maybe coronary artery bypass is worth almost any price; when carried out unnecessarily, it is worth not even a "bargain" price. 

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TABLE 2

COSTS FOR 300 CORONARY BYPASS OPERATIONS PERFORMED BY ONE SURGEON IN ONE YEAR*

Cardiologists' work-ups	\$120,000
Cardiologists' work-ups, invasive	\$300,000
Anesthesiologists	\$180,000
Surgeon	\$675,000
	(\$1,050,000)†
Hospital, operated patients	\$2,160,000
Hospital, non-operated patients	\$600,000
Total Costs	\$4,035,000

* 7,200 hospital days; 900 intensive care days.

† Some areas of the country have higher surgical fees than in Tennessee.

Replantation and Revascularization Following Trauma to the Upper Extremities

*Experience to Date at
Campbell Clinic and Baptist Memorial Hospital
Memphis, Tennessee*

PHILLIP E. WRIGHT II, M.D.; E. GREER RICHARDSON, M.D.; and
LEE MILFORD, M.D.

For centuries, replantation of the amputated body parts has been a topic of speculation and experimentation. Reports of isolated attempts at replantation appeared in medical literature of the early 19th century.¹

Early in this century, the experimental work conducted by Carrel^{2,3} demonstrated that devascularized parts would survive following successful vascular anastomoses.

Jacobson and Suarez⁴ began the field of microvascular surgery in 1960. Using the operating microscope, they demonstrated that consistently patent anastomoses of vessels with diameters of 1 ml to 3 ml could be performed. Although Malt⁵ was the first to perform a successful replantation of a major human limb amputation, Komatsu and Tamai in 1968,⁶ were the first to report the successful replantation of the completely amputated thumb. They used the operating microscope for assistance with microvascular anastomoses of digital vessels. Subsequent to the reports of these early workers, the experiences with relatively large numbers of successful replantations of amputated parts have appeared in the literature.⁷⁻¹⁰

Indications for Replantation and Revascularization

The replantation of amputated parts is an accepted alternative to primary stump closure when certain conditions for replantation and revascularization are present. Such factors as the patient's age, amputation level, hobbies and emotional stability are important considerations when the part has been amputated. In the upper extremity, an isolated amputated thumb, the

amputation of multiple digits, the amputation of the hand at the wrist, more proximal amputations in younger patients, and the isolated amputation of the index finger or the ring finger of the young woman are suitable for replantation. Sharp, clean wounds are best for replantation. Limbs having minimal crush or minimal foreign body contamination may be successfully replanted. Extensive crushing and contamination are relative contraindications to replantation. Poor prognostic factors also include segmental injuries to vessels, tendons and nerves, and avulsion injuries with extensive stretching of the neurovascular structures.

If a digit has been devitalized by transection of both volar digital arteries, it may be satisfactorily revascularized by anastomosis of a single artery. Transection of both the radial and ulnar arteries to the hand are best treated by repair of either or both vessels. Transection of either of the major arteries to the hand with evidence of sufficient arterial flow through the remaining intact vessel does not require repair of the injured artery.

Preoperative Preparation of the Part

The vessels of the amputated parts should not be clamped or canulated for vascular perfusion. The amputated part should be wrapped with sterile gauze surgical dressing. The dressing should then be soaked with lactated Ringer's solution. The wrapped part should then be placed in a plastic bag which should be closed and sealed. The bag containing the amputated parts should be placed in a closed, insulated ice-filled container. The part should never be immersed in a nonphysiologic solution such as alcohol, iodine, phenol or formalin. To avoid freezing of the part, it should never be placed directly

From Campbell Foundation and Baptist Memorial Hospital, Department of Surgery, Memphis.

Reprint requests to Campbell Foundation Library, 869 Madison Ave., Memphis, TN 38104.

REPLANTATION/Wright

in contact with ice. Appropriate radiographs and photographs of the parts should be obtained.

Preparation of the Patient

Evaluation of the patient's vital function and stabilization and resuscitation of the cardiopulmonary system are of primary concern. If the patient has other more significant injuries, replantation should be delayed. When life-threatening injuries have occurred, replantation of the limb may be contraindicated. In order to avoid injury to the vascular intima, vessels in the amputation stump should not be clamped. A sterile compression dressing sufficient to provide hemostasis should be applied. A tourniquet should not be used. Appropriate radiographs of the patient should also be obtained. After appropriate history and physical determinations have been made, intravenous antibiotics as well as tetanus prophylaxis should be administered.

The candidate for replantation who is amenable to the extensive surgical procedures and prolonged rehabilitation involved should be transported as quickly as possible to the nearest hospital with personnel and facilities sufficient to support the initial replantation procedures, the postoperative care and the rehabilitation of such a patient. Prior to transferring such patients, telephone notification of the replantation team allows adequate time for the preoperative organization. The final decision to replant an amputated part rests with the surgeon who is to manage the patient.

Operative Management

Two surgical teams are essential in the replantation of the completely amputated part. A single team may be sufficient for a part which has been devascularized without complete amputation. In each team, at least one surgeon should have experience in microvascular techniques. This is of particular importance when the amputation is at the wrist or more distal.

Once all structures have been identified on the stump and on the amputated part, it is preferable to repair all structures during the initial procedure. Bony stabilization and vascular repair precede the repair of tendons and nerves. Loose skin closure is preferred to avoid circumferential constriction at the amputation site. Except for local irrigation of the operative field

with heparinized Ringer's lactate solution, systemic heparinization of the patient is rarely done. Low molecular-weight dextran has occasionally been administered intravenously. At times, stellate ganglion blocks and axillary brachial plexus blocks have been used for their vasodilating effects. A bulky, loose, nonconstricting dressing soaked in physiological saline or Ringer's lactate solution is usually applied and reinforced with plaster. The part is held in a position of function.

Postoperative Management

The patient is kept in a warm room and smoking is prohibited, thereby avoiding vasospastic effects of body chilling and smoking. Dressings are soaked every eight hours with physiological saline or Ringer's lactate solution to avoid drying of bloody crusts and subsequent occlusion of vessels. The patient is maintained at bed rest for the first two to three days and then is allowed up only for bathroom and meal activities. During the first three days, 500 cc of low molecular-weight dextran are administered intravenously every 24 hours. Aspirin and thorazine are also given for the first two weeks.

The amputated part is kept at approximately heart level during the postoperative period for three to five days. If signs of venous congestion occur, the part is elevated and occasionally compressed to remove venous obstruction. If signs of arterial insufficiency are apparent, the part is maintained in a more dependent position. Re-exploration at the replantation site of digits has not been performed. The initial procedure has usually lasted approximately three hours for individual digits and 10 to 12 hours for multiple digits. The prospect for restoring vascular patency and flow following thrombosis of a digital vascular anastomosis is poor. Exploration of amputations at the wrist and more proximally has not been necessary. The outlook for successful revision of thrombosed anastomoses at the wrist and more proximally is better. Signs of vascular occlusion at these levels may justify exploration and revision of anastomoses.

Summary of Experience

Since Nov. 3, 1975, 28 parts have been replanted or revascularized in 17 patients. Of the 24 digits, nine were completely amputated or had no demonstrable arterial or venous flow. Seventeen of the incompletely amputated digits had no significant arterial flow, but sufficient veins were

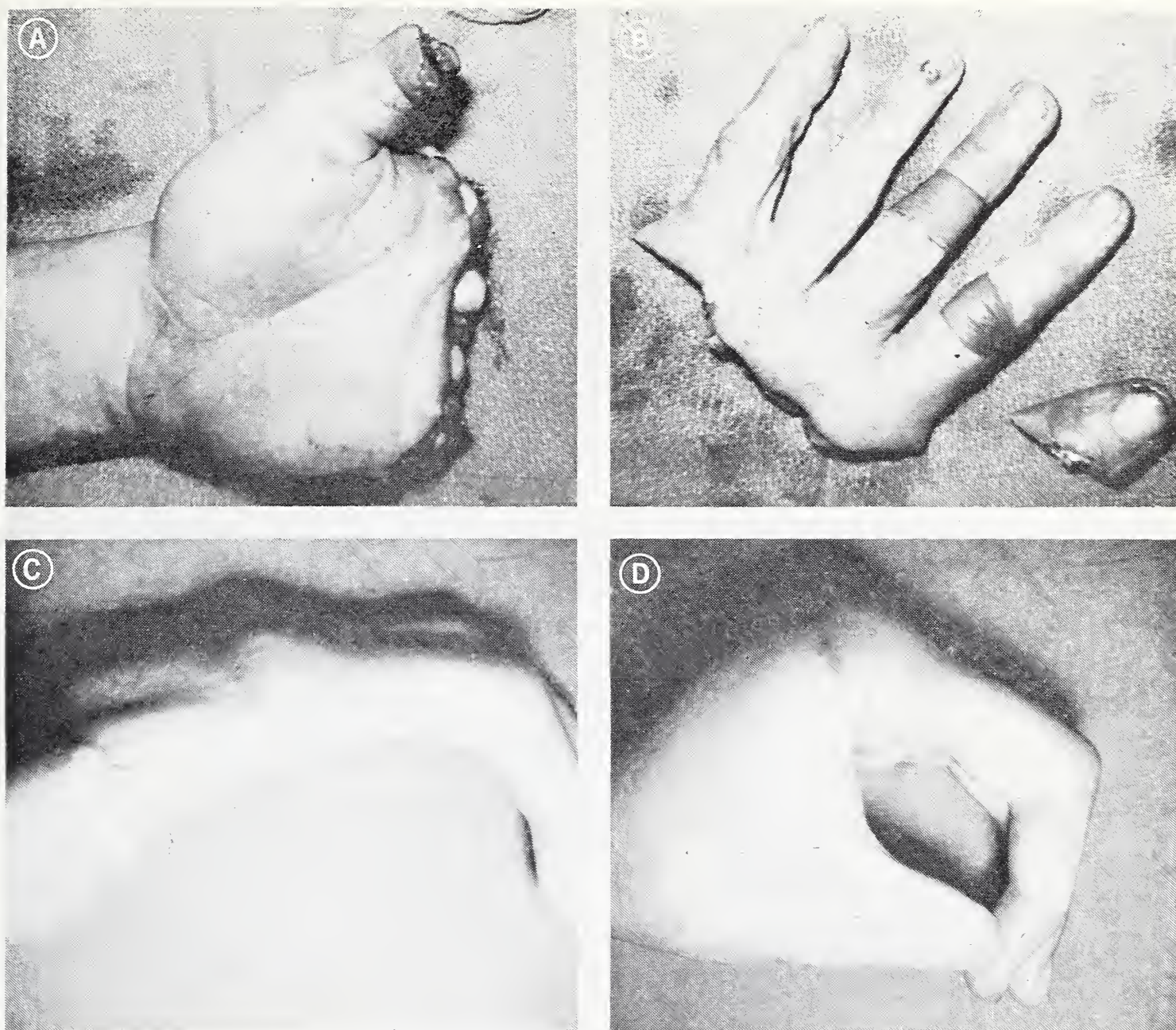


Figure 1. (A-B) Amputation of fingers through metacarpophalangeal joints. (C) Extension of fingers following replantation. (D) Flexion of fingers five months following replantation.

intact. One forearm was incompletely amputated distal to the elbow with no demonstrable arterial flow to the cold, cyanotic hand. One upper extremity was amputated at the supracondylar humeral level and one hand was completely amputated at the radiocarpal level.

Of all replanted and revascularized parts, a single digit has failed to survive. This failure was due to thrombosis of a small vein graft used to restore circulation to the index finger in a patient having lost the index, middle, ring and little fingers.

Our first opportunity to revascularize a digit occurred Nov. 3, 1975, when a 38-year-old woman sustained an avulsion injury to the dominant right thumb (case 1). We first replanted a completely amputated digit on Dec.

16, 1976 (case 2). All four fingers of the left hand of an 18-year-old man were completely transected by a steel shear. He also had sustained a thumb amputation at the interphalangeal joint. Both of these patients have returned to work. More recently (cases 3 and 4), we have had the opportunity to replant a hand severed at the radiocarpal joint and a forearm severed at the supracondylar humeral level. Both of these patients are undergoing rehabilitation.

Case Reports

Case 1. A 38-year-old woman sustained an avulsing injury to the dominant right thumb on Nov. 3, 1975. Evaluation on admission revealed complete devascularization of the right thumb with metacarpophalangeal disarticulation. The only intact structures included the flexor pollicis longus, extensor pollicis longus tendons

REPLANTATION/Wright

and both volar digital nerves. Metacarpophalangeal arthrodesis with repair of a single volar digital artery and two dorsal digital veins was done. Subsequently, the arthrodesis healed. The thumb remained vascularized and the patient regained protective sensation with a two-point discrimination of 5 ml on the thumb tip. She returned to her previous employment on Feb. 19, 1976.

Case 2 (Figs. 1A-D). An 18-year-old factory worker sustained complete amputation of the index, middle, ring and little fingers of his left hand when it was caught in a steel shear on Dec. 16, 1976. In addition to these amputations, he had sustained an interphalangeal amputation of the thumb. Replantation of all fingers and revision of the thumb stump was done.

A vein graft from the forearm was used to revascularize the index finger. In the ensuing two weeks, necrosis of the index finger gradually demarcated at the metacarpophalangeal joint and the digit was disarticulated. Subsequently, the patient underwent index ray resection and returned to work on July 13, 1977 with protective sensation in the remaining fingers.

Case 3 (Figs. 2A-D). A 21-year-old sawmill operator sustained a complete amputation of the right upper extremity at the supracondylar humeral level on July 14, 1977. The tips of the index and middle fingers were also amputated. He was transported approximately 80 miles and underwent replantation of the upper extremity within six hours of his injury. The replanted part survived and the patient is now undergoing rehabilitation.

Case 4 (Figs. 3A-C). On July 13, 1977, an 18-year-old male factory worker sustained a complete amputa-

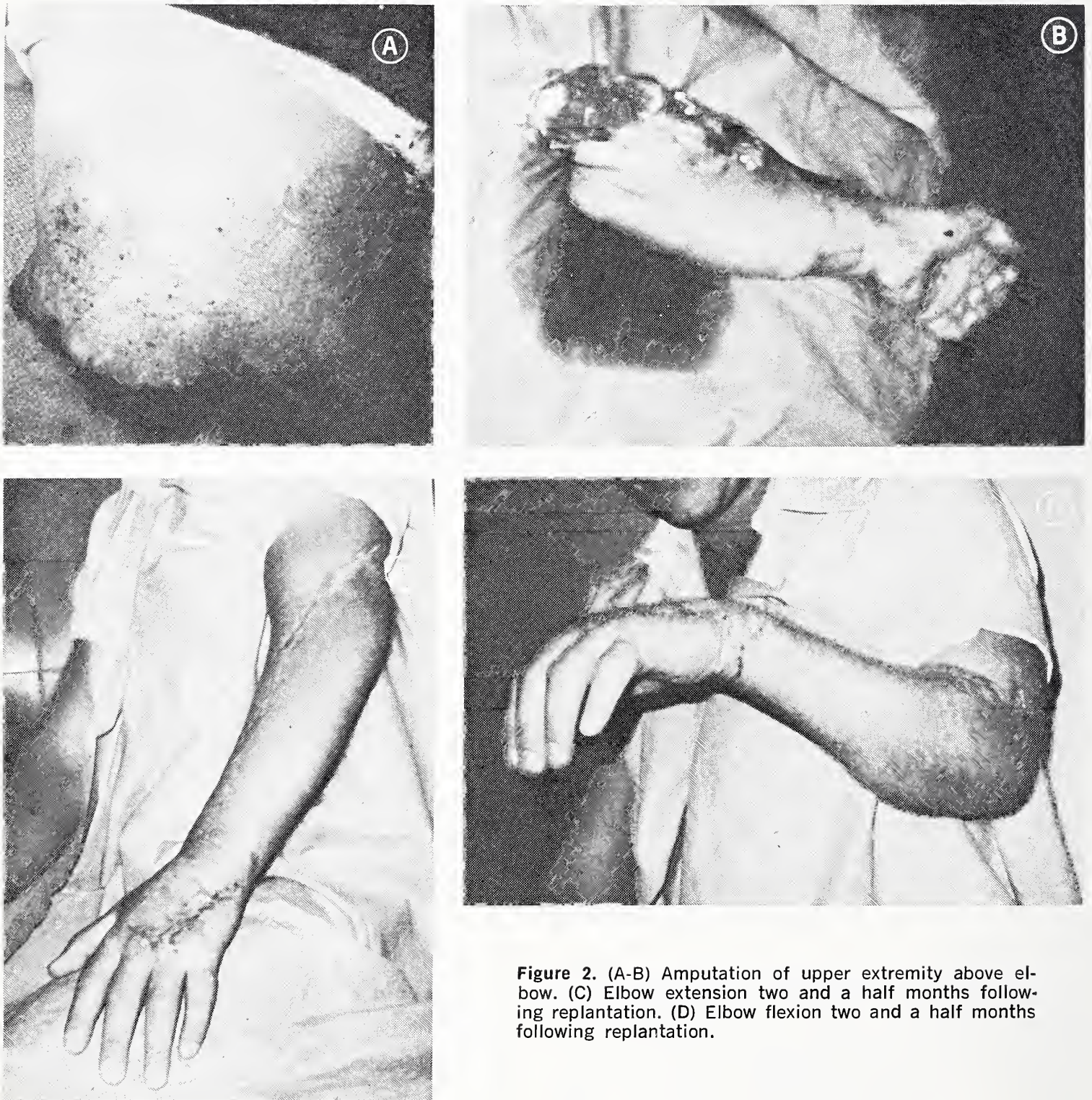


Figure 2. (A-B) Amputation of upper extremity above elbow. (C) Elbow extension two and a half months following replantation. (D) Elbow flexion two and a half months following replantation.

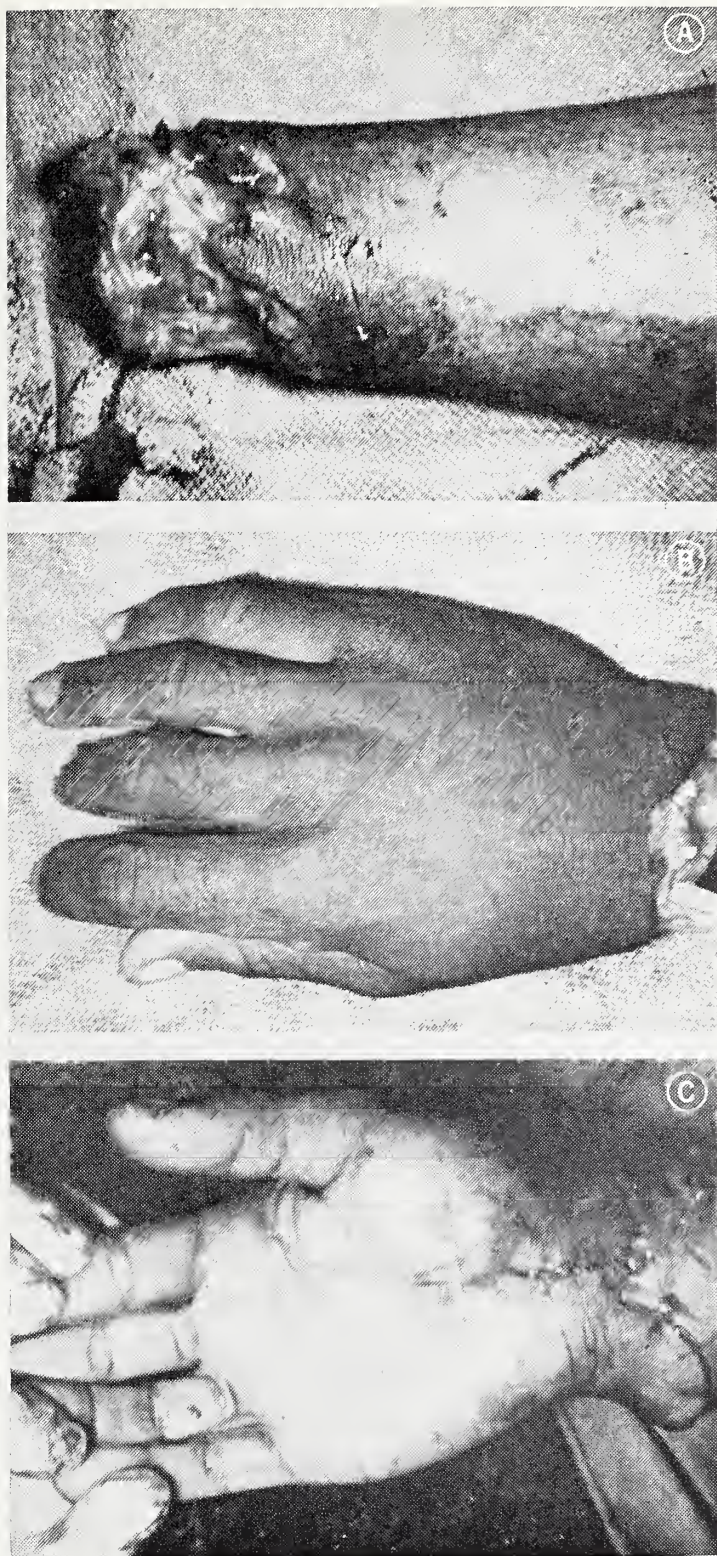


Figure 3. (A-B) Amputation of hand at radiocarpal joint. (C) Replanted hand.

tion of the right hand at the radiocarpal level when a press struck his wrist. Replantation of the hand was done with the repair of all injured structures. He is presently undergoing rehabilitation following survival of the replanted hand.

Summary

Replantation and revascularization of parts completely and incompletely amputated is an accepted practice under certain conditions. For parts amputated distal to the wrist, considerable experience and practice in microvascular techniques is essential. For parts amputated more proximally, experience in the management of all tissues of the upper extremities is desirable. Adequate facilities and supporting personnel are essential. Since Nov. 3, 1975, 28 parts have been replanted or revascularized in 17 patients. A single index finger was lost due to thrombosis of the small vein graft.

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Tricyclic Antidepressant (TCA) Overdose

CHARLES E. KOSSMANN, M.D., Editor

STEVEN REED, M.D.:

A 29-year-old black woman was brought to the emergency room by a male friend who complained that she could not be aroused. They had had an argument on the day of admission and later that day he found her comatose with a half empty bottle of amitriptyline (Elavil) by her side. This was a one-day-old prescription and 2.5 gm of the drug were missing. The patient was supposed also to have taken an unknown amount of diazepam (Valium).

She had attempted suicide in 1970. A hysterectomy was performed in 1976. Social history, family history and review of systems were unremarkable.

Physical examination revealed an obese black woman, lethargic but arousable. Rectal temperature was 98 F, pulse 30/min, blood pressure 130/80 mm Hg, respirations 12/min. Head and neck examinations revealed no trauma; the neck was supple. The pupils were large and reactive and "doll's eyes" were present. The pulmonary and cardiovascular examinations were essentially within normal limits. Bowel sounds were hypoactive. There was cyanosis of the extremities. Deep tendon reflexes were present and equal bilaterally, 2+ in the upper extremities and 3+ in the lower extremities. Babinski's sign was absent. Examination of the motor, sensory and cranial nerves were all normal.

Laboratory examination revealed a hematocrit of 36%, white blood cell count of 15,100/mm³ with 5 neutrophilic bands, 87 polymorphonuclear leucocytes and 8 lymphocytes per 100 white cells. Arterial blood gases on room air revealed pH 7.37, PO₂ 85 torr, and PCO₂ 42 torr. A urinary drug screening on admission was positive for diazepam. Urinalysis, electrocardiogram, roentgenogram of the thorax, and routine blood chemistries were normal.

Hospital course: The patient was treated in the emergency room with three doses of intravenous physostigmine, 2 mg each, and promptly became more arousable. After nasogastric lavage, she was given 30 gm of activated charcoal by way of the tube, followed by 12 oz of magnesium citrate. She was then admitted to the intensive care unit, given nasal oxygen, and maintained on intravenous fluids. She was also given physostigmine 2 mg, IM, q 4 h. Atrioventricular nodal premature systoles were noted on the cardiac monitor which would disappear after an injection of physostigmine. They subsided by the fourth hospital day, at which time the patient was transferred out of the ICU.

A psychiatric opinion was obtained because of suspected suicidal tendencies. Follow-up care was suggested at the Mental Health Clinic to be supervised by

a social service worker. The patient was discharged without medication.

KERRY M. SCHWARTZ, M.D.:

The case Dr. Reed presented to you is one of many examples of overdosage of tricyclic antidepressants (TCA) that we have seen this year in the City of Memphis Hospital emergency room. Although the precise cause of endogenous depression for which these agents are prescribed has not been definitely established, it is clear they are effective in controlling the symptoms if used properly. Before dealing with the management of an acutely intoxicated patient let us examine briefly the pharmacologic properties of the individual agents, including mechanism of action, the relationship of plasma levels to the tissue distribution, and the metabolism and excretion of the active TCA compounds and their metabolites.

The nucleus of the TCAs is tricyclic dibenzazepine (imipramine [Tofranil]) which differs from the phenothiazine, promazine, only by substitution of a sulfur atom for the nitrogen atom in the middle ring (Fig. 1). Substitution of a carbon atom for nitrogen yields the dibenzocycloheptadiene derivative, amitriptyline, and substitution of an oxygen yields dibenzoxepin (doxepin[Sinequan]) (Fig. 1).

After it was discovered in the 1950s that reserpine depleted stores of norepinephrine (NE) in the central nervous system, a surge of neurophysiological investigation was begun to prove the proposal that naturally occurring depressions were at least associated with depleted NE stores at central adrenergic synapses. Figure 2 is a schematic model of the central noradrenergic synapse.¹ The tricyclic antidepressants (imipramine and amitriptyline) and amphetamines deactivate a specific amine pump that reabsorbs the transmitter, NE, back into the nerve ending after it has been released into the synaptic cleft. The monoamine oxidase (MAO) inhibitors (e.g., Promate) block the breakdown of epinephrine and NE by the enzyme, monoamine oxidase. The

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City of Memphis Hospital Case No. 515620. Presented April 27, 1977.

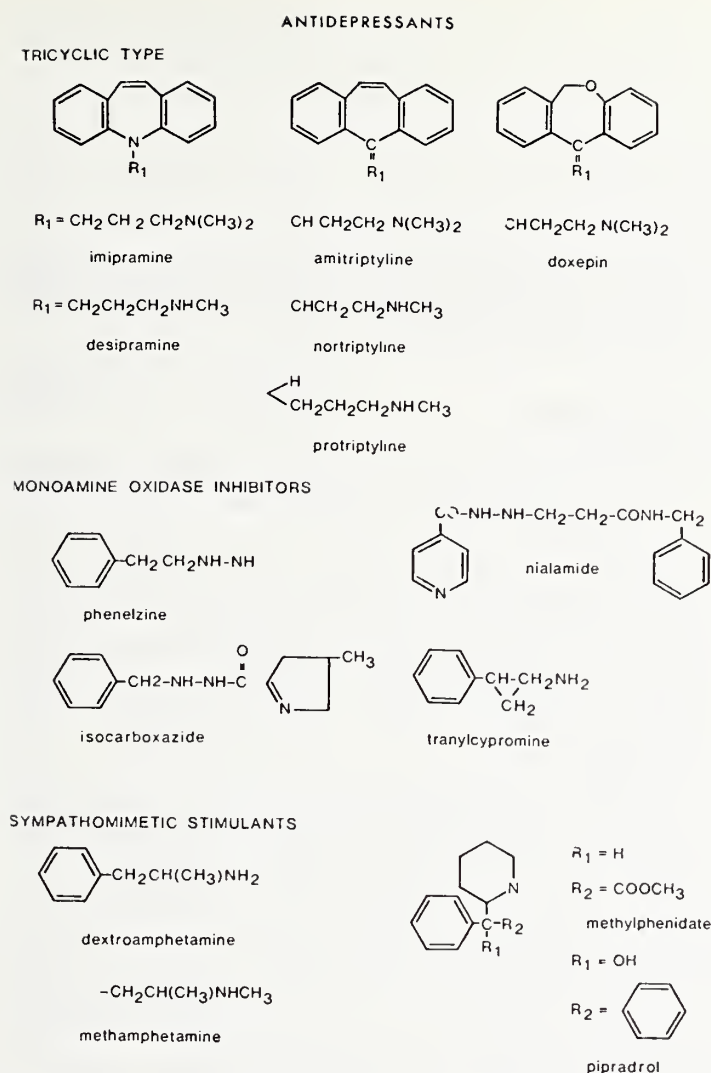


Figure 1. Structural relationships between three chemical classes of antidepressants (after Hollister¹ with permission).

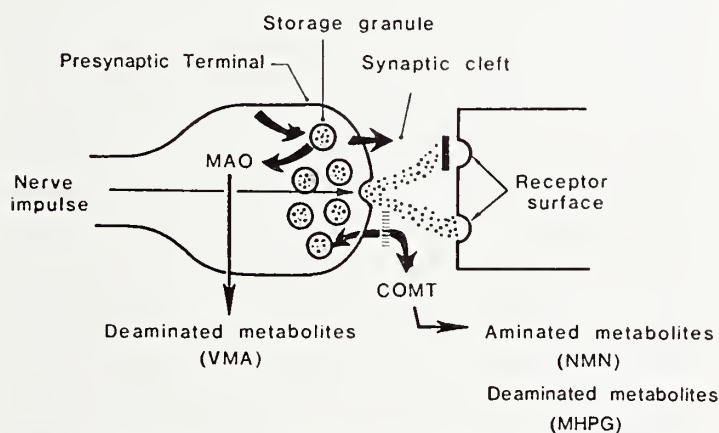


Figure 2. Model of central noradrenergic synapse. Constant intraneuronal synthesis, storage and catabolism (via monoamine oxidase, MAO) to deaminated metabolites (vanilmandelic acid, VMA). Neural transmission releases norepinephrine into synaptic cleft where postsynaptic receptor is activated. Transmission is limited by enzymatic catabolism of transmitter (via COMT, catechol-O-methyl-transferase) to aminated metabolites (NMN, normetanephrine) or deaminated, decarboxylated metabolites (MHPG, 3-methoxy, 4-hydroxyphenylglycol). Major limit of synaptic transmission is via specific amine pump which reabsorbs transmitter back into nerve ending; tricyclics and amphetamine block this pump (vertical cross-hatched lines). Monoamine oxidase inhibitors block enzyme, MAO, allowing for greater accumulation of transmitter in storage. Chlorpromazine and other antipsychotic drugs block postsynaptic receptor (vertical solid line) (after Hollister¹ with permission).

inadequacy of norepinephrine stores, presumed to occur in depressed states, might be ascribed to a genetically determined impaired synthesis, impaired release, increased metabolism, or hyperactivity of the amine pump mechanism. However, data from studies in man are incomplete; most of the work done has been on laboratory animals. Criticism has been aimed at the fact that most investigators have studied NE to the exclusion of other bioactive amines during their investigations, and that there really may be an imbalance of several such amines, including serotonin, in the central adrenergic synapse in depressive disorders. Observed clinical behavior frequently conflicts with the experimentally acquired data. Therefore, no definite conclusion can be made to link the neurochemical findings with the symptoms of patients with pathological depression. It is well known that endogenous depression does occur in families, and it is often considered to be hereditary.

Absorption and Distribution

The TCAs are absorbed well from the gastrointestinal tract and bound rapidly to protein (greater than 20%) with subsequent distribution to the liver, heart, kidneys and lungs. While blood levels may be low, tissue levels can be quite high. Active metabolism occurs chiefly in the liver primarily by a two-step process of demethylation. Imipramine is demethylated to desipramine (Norpramin), amitriptyline to nortriptyline (Aventyl), and doxepin (Adapin, Sinequan) to desmethylsoxepin, an inactive compound. Both desipramine and nortriptyline are active metabolites and some investigators feel the former is the more active demethylated portion of imipramine. Further demethylation may occur to inactivate all these compounds. Hydroxylation may occur early or late, to give other active compounds. Finally, glucuronidation occurs to yield soluble products which may be excreted in the urine (two thirds) and the feces (one third). Less than 3% of unchanged TCAs are excreted in the urine; they are excreted actively for the most part via bile into the gastrointestinal tract by way of an unusually active enterohepatic circulation.

Adverse Effects

The anticholinergic side effects of the TCAs are magnified with the ingestion of toxic concentrations. Subjectively, these may include dry mouth, blurred vision, tachycardia, palpitation,

urinary retention, constipation, delirium, increased irritability and drowsiness. The objective findings include dilated sluggish pupils, paralytic ileus, urinary obstruction (autonomic), somnolence, hyperreflexia, myoclonus, choreoathetosis, convulsions, coma, atrial and ventricular arrhythmias, atrioventricular and intraventricular block, and hypotension. Recently the clinical pharmacy services of the University of Tennessee² have observed that patients on these drugs may present without the obvious anticholinergic effects; the absence or presence of these effects does not always reflect the severity of the intoxication. Generally, the level for toxicity is 1.2 gm of ingested drug; a fatal dose in most adults is 2.5 gm. The most serious effects and those most difficult to manage are cardiac.³ Most investigators state that conduction abnormalities are more frequent and troublesome than atrial and A-V nodal premature contractions. Myocardial contractility is moderately depressed, presumably from failure of reabsorption of myocardial catecholamines after their local release.

Thorstrand⁴ collected data from right heart catheterization of patients with TCA overdose during and after coma, and found there was an increase in peripheral vasodilatation, an increase in cardiac output in most, with a slight decrease in stroke volume but an increased heart rate. He proposed that this was probably due to an adrenergic "overdrive" in the circulation probably secondary to increased catecholamines. No real effort, however, was made to actually document the levels of the catecholamines in the blood, urine, or tissues and correlate them with the hemodynamic findings. It may be that an enhanced adrenergic stimulus temporarily balances whatever toxic effects occur on the myocardium.

Prevention

The diagnosis of depression must be certain before prescribing the antidepressants. Many patients respond to simple psychological measures (e.g., counseling). The intensity of the depressed mood is not by itself a reliable indicator of the need for drug therapy; there should be other psychological and physiological disturbances such as disruption of somatic functioning with anorexia, weight loss, sleep disturbance, weakness, fatigue, decreased libido, and loss of self-esteem. If these symptoms become severe or if suicide is contemplated, psychiatric consultation is mandatory as it should be on every overdose admission. High doses should be avoided in the

elderly. These drugs should be avoided altogether in disease of the liver and used with extreme caution in cardiovascular disease. Finally, patients on these drugs should be observed frequently, probably once a week. Large quantities with numerous refills should not be prescribed. These agents will yield good therapeutic results as long as special alertness is maintained for the myriad of toxic effects discussed above.

Management

Proper management of TCA toxicity includes (1) an intense effort to remove the ingested drug; (2) detailed supportive care, e.g., cardiac monitoring, maintenance of fluid and electrolyte balance, and respiratory care; and (3) specific pharmacological therapy aimed at the reversal of cardiac arrhythmias and central nervous system manifestations.

Initially, vigorous lavage of the stomach should be instituted through a large bore nasogastric or Ewalt tube with normal saline, positioning the patient on one side with the usual precautions to prevent aspiration. If the patient is awake, emesis may be induced with 15 cc of ipecac and water.

Since clearance of the TCAs is not facilitated by forced diuresis or dialysis, efforts must be made by the oral administration of activated charcoal to prevent further absorption of the ingested compounds and the reabsorption of the TCAs and their metabolites that have been excreted into the bile. It has been shown that early (within two to three hours of ingestion) lavage and the use of charcoal remove up to 20% of the ingested dose during the first 24 hours. Gard⁵ from the University of South Carolina has demonstrated pharmacokinetically the disposition of the TCAs in gastric and biliary juices, and the significance of giving large doses (up to 100 gm) of activated charcoal within the first 24 hours.

Supportive care consists of constant electrocardiographic monitoring for at least 72 hours (though arrhythmias have been reported up to one week), correction of any fluid or electrolyte imbalance and difficulties with ventilation (intubate if necessary). If the patient is hypotensive, try fluids initially; next, use a direct pressor agent, e.g., norepinephrine, but *not* metaraminol (Aramine) because TCAs block the uptake of metaraminol into the neuron.

Physostigmine, an anticholinesterase compound that crosses the blood-brain barrier because of its quaternary ammonium structure, is the initial

Continued on page 113

Progesterone Receptors in Breast Cancer

JOSEPH J. SANNELLA, M.D.

The assaying of breast tumors for estrogen receptors (ER) has gained wide acceptance in a surprisingly short time. The rationale for the assay is that if recurrent disease makes its appearance, endocrine therapy has a 55% chance of producing a favorable response if ER was positive.¹ ER-negative tumors as a group show little or no response. The therapist cannot wait for recurrence before assaying for ER because often the new lesion is surgically inaccessible or too small for assay.

If ER positivity is the mark of hormone dependence, why do 45% fail to respond to endocrine treatment? Some of these failures are no doubt due to the fact that the metastasis can lose its dependence on estrogen and flourish without it. This functional dedifferentiation might account for as many as 25% of the failures.

Savlov et al² have provided a different perspective that sheds more light on the question of failures by showing that ER can be demonstrated in two different cytosol fractions recovered by sucrose density gradients. In a small series, those tumors with only 4S receptors manifested a poor response (0%) to endocrine treatment, whereas those with 8S receptors were treated much more successfully (70%). Thus, the mere presence of ER is not necessarily an indication of estrogen dependence.

Another approach to more specifically identifying hormone dependence is assaying for progesterone receptors (PgR). It is now known that prolactin causes responsive cells to elaborate ER.

From Clinical Laboratories of Nashville, 2525 Park Plaza, Nashville, TN 37203.

Estrogen entering the cell combines with ER and this complex stimulates the production of PgR. In view of this, PgR is a biological end-product of estrogen stimulation, and as such, it not only confirms the recent presence of functioning ER but proves that the cell is influenced by endocrine regulation.

Horwitz and McGuire³ have examined over 500 cases of breast cancer for both ER and PgR. In their series, 44 patients required endocrine therapy. The responses, correlated on the basis of ER and PgR positivity, demonstrate the predictive value of these assays as follows: (1) Eight tumors were negative for both ER and PgR and none (0%) showed a favorable response. (2) Sixteen tumors were ER positive but PgR negative; 37% of these responded favorably. (3) Twenty tumors were positive for both ER and PgR. This group had a favorable response in 70%.

In their large series, 9% of the tumors showed ER negativity and PgR positivity. None of these cases received endocrine therapy, therefore no predictive data are available.

Progesterone receptor assays are now available for routine use in several reference laboratories. The handling of the tissue specimen is the same as for ER assays. At least 1 gm of tissue trimmed of fat and necrotic debris is required if both assays are to be performed.

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Ultrasound Evaluation of a Case of Pancreatitis

ROBERT L. BELL, M.D.

Two years ago this 78-year-old white woman had right upper quadrant pain and demonstrated gallstones, which led to a cholecystectomy. Several months later a retained common duct stone was detected and led to reexploration and removal of the stone. The patient did well for six months and then developed weight loss, nausea and pain for which she was hospitalized. Serum amylase

determinations done on several occasions varied from 850 to 1500 mg% and the diagnosis of persistent pancreatitis was made. Intravenous cholangiogram showed a common duct dilated up to 2 cm which tapered distally. No stones were seen. Celiac arteriograms and upper and lower GI x-rays were within normal limits. The patient had an elevated alkaline phosphatase (244 mg%) and total protein of 5.6 with an albumin of 2.8 gm%. SGOT and LDH were borderline elevated and the white count was slightly elevated. Vital signs were within normal limits.

An ultrasound scan of the upper abdomen showed a swollen, edematous pancreas with a prominent uncinete lobe consistent with pancreatitis (Fig. 1). A dilated elongated structure just above the pancreas which extended downward was also seen (Fig. 2) and was thought to be the dilated common duct. No stones were demonstrated. The patient did poorly and symptoms of pain and nausea increased. Two weeks later the ultrasound study was repeated (Fig. 3) and the structure that was thought to be dilated common duct on the prior ultrasound study was now greatly dilated and clearly a pancreatic cyst. It extended across the midline and superiorly to the main portion of the pancreas.

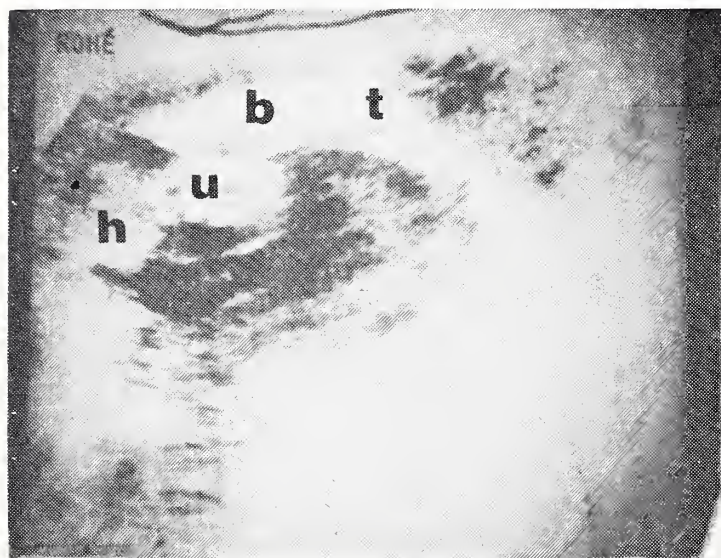


Figure 1. H = Head; B = Body; T = Tail; U = Uncinete Lobe.

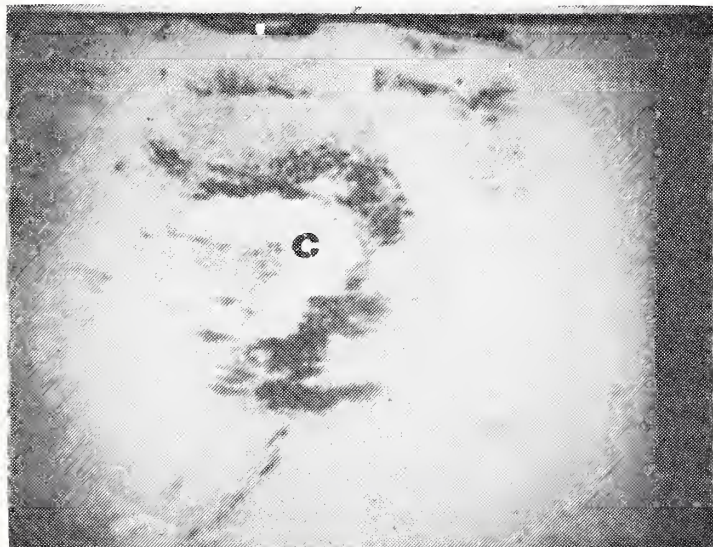


Figure 2. C = Cystic Structure.

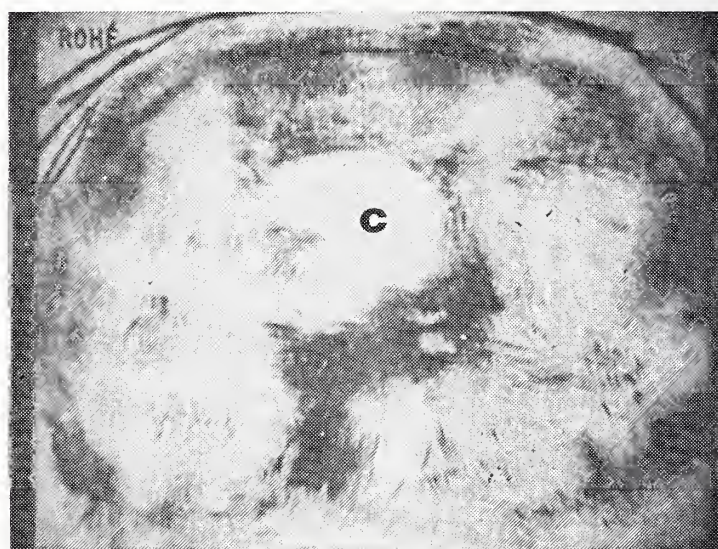


Figure 3. C = Pancreatic Cyst.

From the Department of Nuclear Medicine and Ultrasound, Park View Hospital, Nashville, TN 37203.

The patient was taken to surgery and the cyst was drained. Pancreatic biopsy showed acute pancreatitis. No stones were demonstrated in the common duct. The patient has had a very stormy postoperative course.

Even though ultrasound, CAT scanning, and endoscopic retrograde cholangiopancreatography have helped improve our diagnostic acumen, pancreatic and biliary tract disease remain a difficult diagnostic problem. Differentiation of a dilated common duct from vascular structures, choledochal cyst, intrahepatic gallbladder, and in this case a pancreatic cyst can be very difficult. In

addition, the ultrasound evaluation of the common duct will often fail to show stones within the common duct. Furthermore, although a sonolucent enlarged pancreas is consistent with acute pancreatitis, if these changes are seen only in the head of the pancreas it could be indicative of pancreatic adenocarcinoma with very little fibrous tissue proliferation. In the case presented here the second ultrasound study showing significant increase in the size of the cystic structure thought on the first study to be cystic duct was crucial in differentiating dilated common duct from pancreatic cyst.

Medical Grand Rounds . . .

Continued from page 110

drug of choice for both the arrhythmias and the CNS manifestations of toxicity. The specific indications are hallucinations, convulsions, hypotension, and the cardiac arrhythmias. It may be used, as we used it here in this patient in coma, to give it on a trial and error basis, but it shouldn't be used for the management of coma. It is mainly reserved for the other manifestations. Multiple drugs, as in this patient who also took Valium, will complicate the manifestations and the treatment.

The dose of physostigmine currently being advocated is 1 to 2 mg IM or IV initially. Intravenous administration should be slow over three to five minutes. The dose can be repeated in 20 minutes if there is no response. Thereafter 1 to 4 mg can be given every 30 to 60 minutes as needed. This frequency is necessary because the half-time ($t_{1/2}$) of the drug is extremely short.

If the arrhythmia is refractory to physostigmine, and some are, diphenylhydantoin (Dilantin) is the second drug of choice; it can be given in a dose of 100 mg IV over three minutes. This may be repeated every five to ten minutes until an effect is achieved or a total of 1,000 mg has been given.

Propranolol has been shown in several studies to be an effective agent except when significant degrees of atrioventricular block are present which could be aggravated by this agent.

Procainamide and quinidine are to be avoided. The use of digitalis in treating these arrhythmias is controversial but when you think about it, digitalis might increase the heart block and the ventricular automaticity thus predisposing to more rather than less arrhythmia.

Psychological Aspects

For the general internist, the diagnosis of pathological depression must be established before prescribing a TCA. Many patients will respond to simple psychological counsel. Others are sick enough to need electroconvulsive therapy and phenothiazine therapy in large dosage in a hospital. To make a diagnosis of depression, consider other psychological or physiological disturbances such as disruption of somatic functioning, interference with normal libido, weight loss, extreme weakness or fatigue, or loss of self-esteem. If there is an impairment in lifestyle, interference with routine functioning, or if any of the psychological symptoms noted earlier become severe, especially if suicide is contemplated, a psychiatric consultation is mandatory. Further, whenever these patients come into the emergency room after toxic doses, a psychiatrist's opinion must be obtained. I think the feeling of the Department of Medicine here is that medical personnel should handle them whenever they first come in with an overdose but a psychiatrist should share the management after all of the cardiologic and neurologic manifestations have been corrected.

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EKG of the Month

W. BARTON CAMPBELL, M.D.

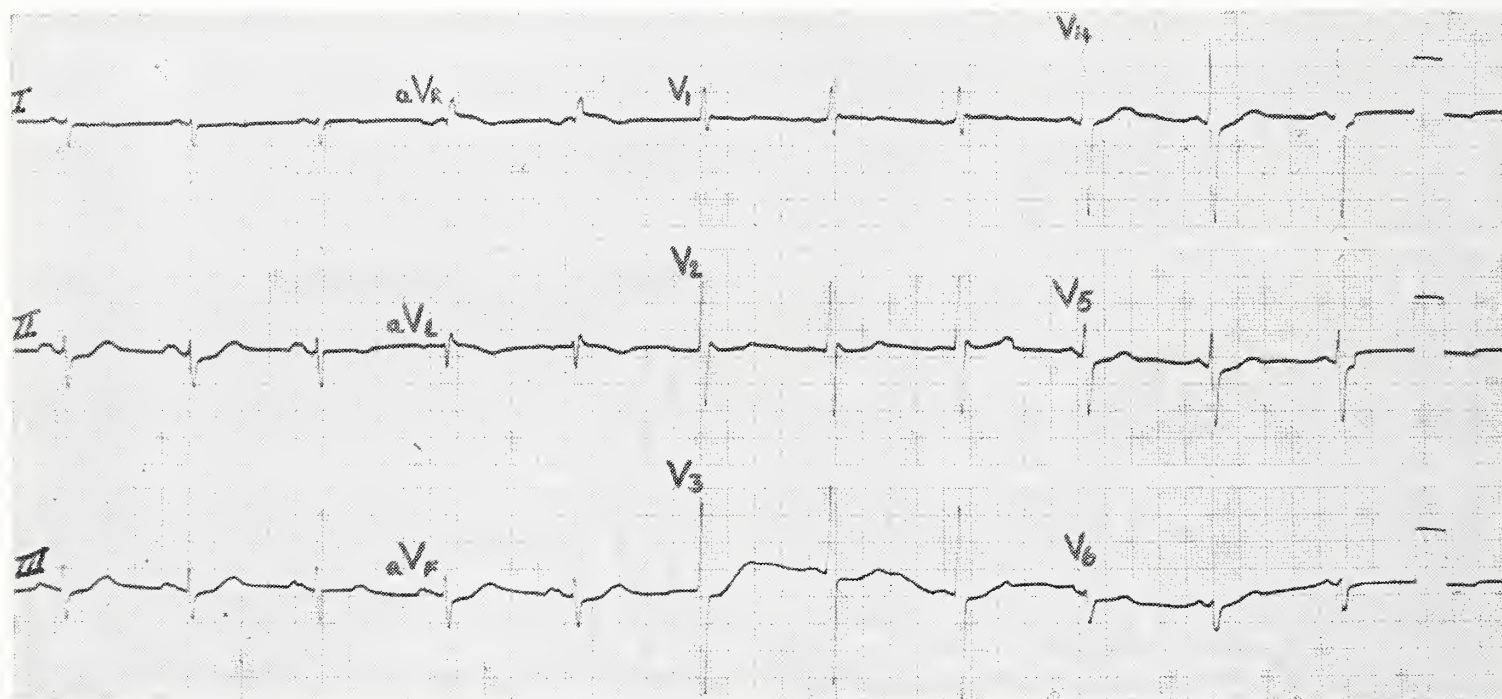
A 64-year-old woman entered the hospital with a three-month history of progressive shortness of breath, with a recent episode of hemoptysis. For the preceding year she had slept on three pillows, and on two occasions in the month antecedent to admission she had awakened from sleep with "smothering." She found this was alleviated by standing up and walking around. She had no antecedent history of cardiac disease, though there was a question on examination several years ago of a heart murmur.

At the time of admission blood pressure was 112/80, the pulse was 65 beats per minute and regular. She had no edema, and no rales or rhonchi were audible. Examination of the cardiovascular system revealed the arterial pulses to be of normal contour and amplitude in all four extremities. On auscultation the first sound was loud, and closely following the second sound was an opening snap with an estimated S₂-OS interval of 0.09 seconds. In the left lateral decubitus position a well-localized diastolic grade II rumble was audible at the apex, which was accentuated just prior to systole. Chest film showed prominence of the left atrial appendage and moderate left atrial enlargement. Calcification was not apparent. There was prominence of the venous pattern to the upper lobes bilaterally. An electrocardiogram was obtained. (Fig. 1).

upper limits of normal at 0.20 seconds. The P wave is unusually long with a duration of 0.14 seconds.

Note that the P wave is slightly notched in leads II, III and AVF, and is not visible in leads V₂ or V₃; it is slightly inverted (almost isoelectric) in V₁. The PR segment (portion following P wave prior to QRS complex) has a duration of 0.06 seconds, and P wave to PR segment ratio is 2.3 seconds. Macruz et al¹ noted a P wave to PR segment ratio of greater than 1.6 to be very suggestive of left atrial enlargement, as is the abnormally notched P wave.

Right axis deviation is present, with a mean QRS axis of approximately 160 degrees. (Note the deep S wave in standard lead I and the prominent R wave in AVR.) There is also a very prominent anterior QRS force, resulting in an R wave in V₁ of 6 mm amplitude. Rightward, anterior QRS forces with normal QRS duration



Discussion

The tracing shows a sinus rhythm with a rate of 63 per minute, and the PR interval is at the

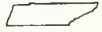
From the Department of Cardiology, St. Thomas Hospital, Box 380, Nashville, TN 37202.

are the hallmark of right ventricular enlargement. In this case the RS ratio in V₁ is in excess of 1.0 seconds, which meets conventional criteria for right ventricular enlargement.² There are minor nonspecific ST-T wave changes present, with sag-

ging ST segments in leads II, V₅, V₆ and ST segment elevation in AVR and AVL. Note that the T waves are inverted in AVL and slightly inverted in V₁.

Echocardiography disclosed a left atrial echo diameter of 6.5 cm (upper limits of normal 4.0), and there was marked slowing of the mitral valve closure rate, which was measured at 48 mm/sec (normal 70 to 150 mm/sec). In addition, there were multiple echos noted from the mitral valve. The posterior leaflet of the mitral valve moved anteriorly slightly during diastole (paralleling the motion of the anterior leaflet of the mitral valve),

and the anterior mitral leaflet amplitude, echocardiographically, was measured at 1.7 cm (normal 2 to 3.6 cm). This patient had physical and echocardiographic findings of mitral stenosis of moderately severe degree.

Final diagnosis: (1) Left atrial enlargement.
(2) Right ventricular enlargement. 

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WHAT DOES THE PUBLIC THINK OF THE HEALTH CARE SYSTEM?

Medicine's leadership scored highest in two recent Harris Surveys as public confidence in major institutions increased throughout the country. In a survey taken in late 1977 and released last week, Harris reported that the public shows its greatest confidence in the "people running medicine." Fifty-five percent of the public said it has "a great deal of confidence" in medical leadership, compared to 42% in a survey made in 1976. Of the 16 "institutions" tested, only the press failed to score higher than in 1976. Scoring second to medical leadership was higher education with 41%. The other percentages: organized religion, 34%; U.S. Supreme Court, 31%; the military, 31%; television news, 30%; White House, 26%; major companies, 23%; executive branch of government, 23%; local government, 21%; state government, 19%; the press, 19%; law firms, 16%; Congress, 15%; organized labor, 15%; advertising agencies, 11%.

A few weeks earlier Harris released a similar survey designed to test whether the public thinks the leaders of various institutions and professions are "in touch with" the people they are supposed to lead or help. Again medicine led the list. Seventy-three percent of the public said medicine's leaders "really know what people want," up from 69% in 1975. Next to medicine was television news with 67%. At the bottom of the 15-institution list was Congress with 31%.

A Roper Survey released late in December indicates that the public is becoming less satisfied with all types of services. Roper found 54% of the public to be "very well satisfied" with its banking services. Physicians and dentists followed with identical ratings of 45%. The physician rating had dropped from 50% in 1975 and the dentist rating had fallen from 52%. Thirty-nine percent said they were very well satisfied with their hospitals, down from 45% in 1975. The greatest declines in satisfaction were shown for television and radio stations. TV stations fell 13 percentage points in two years. Radio stations were down 12 points.

Another Harris Survey released at year's end shows that 62% of the public feels that the current system is acceptable, although only 39% show real enthusiasm for it. On the other hand, 49% of the public is opposed to "a national health service under which everyone would get free health care paid for out of taxes; in such an arrangement, doctors would work for salaries paid for by the government, and hospitals would be managed by the government." Only 31% of the public favored such a scheme.

CAT Scan of the Month

STEPHEN L. GAMMILL, M.D.

The patient for presentation is a 70-year-old white male with back pain and fever. Please examine the CAT scans in Figures 1-3 and see if you can deduce the diagnosis. The cuts were made in the lower abdomen and pelvis.

Discussion

Note in Figure 1 that the lamina of the L4 vertebral body has been surgically resected on the

right. (You are viewing the scan as if looking up from the feet of the patient.) In addition, the vertebral bodies of L4 and L5 (Figs. 1 and 2) are partially destroyed as a result of osteomyelitis. These vertebral bodies are surrounded by soft tissue masses which upon close inspection showed a mottled pattern that may be associated with abscess. In Figure 3, note the soft tissue opacity adjacent to the right pelvic wall (the bone represents ileum and ischium above the acetabula). This represents abscess extending inferiorly into the pelvis. The well-outlined triangular radiolucency in the midline adjacent to the abscess is the rectum. In Figure 1, the iliac arteries are visible anterior to the abscess. They are identifiable by white specks of calcium in their walls. The other small round opacity adjacent to the abscess is probably a lymph node.

Although plain roentgenograms of the lumbar spine demonstrated the bony destruction of the spinal vertebral bodies in this case, they and ultrasonographic examinations failed to demonstrate the presence or extensiveness of the abscess. The sacroiliac joints were intact on other cuts from the CAT scan.

Diagnosis: Osteomyelitis involving the L4 and L5 vertebral bodies, with soft tissue abscess.

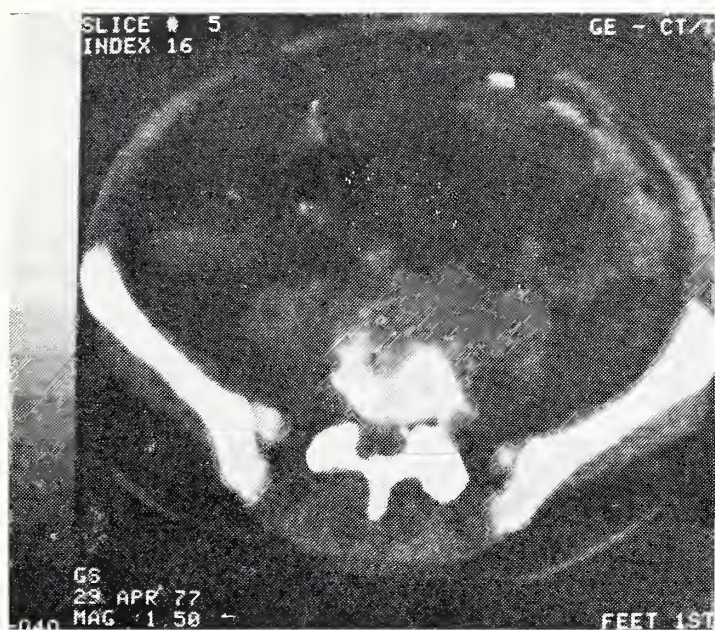


Figure 1

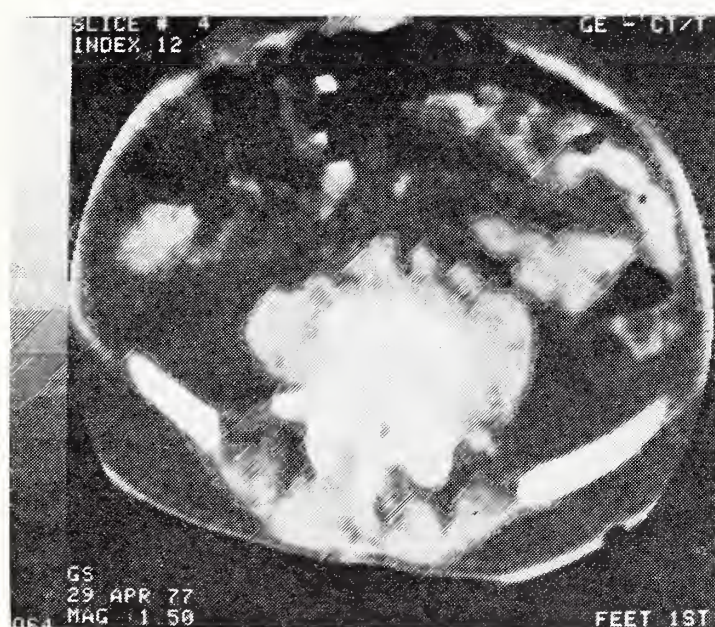


Figure 2



Figure 3

From the Department of Radiology, Baptist Memorial Hospital, Memphis, TN 38146.

Homicide and Suicide As Leading Causes Of Decreasing Life Expectancy Of Young Black Males

During the decade from 1960 to 1970 the life expectancy of black males in the United States actually decreased. This reversed a well-established trend for men and women in the United States to live longer—a trend which has paralleled the advance of medical science in the present century. The recent decrease in life expectancy for black American males was accounted for to a very considerable extent by a dramatic increase in rates of homicide, suicide, and accidents among black males between the ages of 18 and 30.

Violent causes of death account for over one half of all deaths for young black males. They die from homicide at a rate that ranges from 6 to 20 times as high as that of young white males. Suicide patterns have changed. Once thought to be rare among blacks, young black males are now killing themselves at the same rate as their white counterparts. Suicide rates among young males of both races have tripled since 1950. These findings, true for Nashville, Tenn., also have been reported nationally for other metropolitan areas by the National Center for Health Statistics.

Dr. Ruth Dennis, director of research, Department of Psychiatry, Meharry Medical College, Nashville, Tenn., is one of the pioneers in this research area. She co-authored a publication with Dr. Kurt Gorwitz¹ on the decrease in the life expectancy of black males in Michigan. More recently research findings by Norman B. Rushforth et al² documenting this same phenomenon in Cleveland, Ohio was widely publicized in the press. Both research efforts suggest the factor most consistently associated with the increased death rate from both homicide and suicide of

black males is the increased use of drugs and hand guns.

These and other facts derived from published actuarial reports have been of special concern to Dr. Dennis. In 1975 she organized a group of behavioral scientists to investigate the causes. Another function of this group was to steer involvement of community leaders in the direction of developing intervention strategies to alleviate the high death rate of young black men.

In 1976, the aforementioned research effort presently entitled "Profile: Black Males At Risk To Low Life Expectancy" was funded at Meharry by the Center for Epidemiological Studies, NIMH, DHEW. This in-depth study is intended to demonstrate the factors which lead to early death from violent causes for young black males. Dr. Dennis and her colleagues, Dr. Edna Lockert, psychologist, Dr. James McCorkel, sociologist, and Ms. Bettie Nelson, biostatistician, emphasize that more than vital statistics must be known if the problems or conditions resulting in death are to be reduced. The resulting intervention measures must be based on comprehensive research findings of personal, social, and environmental conditions which enhance the chance of a premature death as a result of violence.

To assist and advise with the study, a panel of community leaders meets on a regular basis with Dr. Dennis and her colleagues to discuss the progress of the study and to collaborate on research methods and findings which will be most useful in yielding information which will point the way for the community to solve the existing problem. This panel consists of Mr. Charles Bass, assistant commissioner of corrections; Mrs. Lettie Galloway, director of patient welfare services, Meharry Medical College; Rev. Kelly Miller Smith, minister, First Baptist Church-Capitol Hill; Dr. Harold Jordan, commissioner of mental health and mental retardation, State of

¹From the Tennessee Department of Mental Health and Mental Retardation, Nashville.

Tennessee; Dr. Sherman Webster, professor, Department of Sociology, Tennessee State University; and Mrs. Lacey Murray, assistant warden, Tennessee State Prison.

The research design involves interviewing three groups of black males ages 18 to 35. Group I is being drawn from those convicted of homicide and serving time in the state's prisons. Group II consists of assault victims treated in Hubbard and General hospitals' emergency rooms. Group III is a control group of black men randomly selected from the general population.

These three study groups are being administered a standardized questionnaire designed to collect demographic and developmental data on the socio-cultural aspects of the individual's life. They are also being given a series of psycholo-

gical tests to better understand their basic personality orientation.

The progress of this research was the subject of two papers given at the recent meeting of the National Medical Association, Aug. 4, 1977, in Los Angeles, by Drs. Dennis and Lockert. Preliminary findings suggest that violent deaths among young blacks are tied to social and environmental stress, and that violent deaths among young black males are approaching "epidemic" proportions. The National Medical Association has termed the situation a public health problem requiring national action.

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MEDICAL SCHOOL ENROLLMENT SHOWS ANOTHER INCREASE

Total enrollment in the 116 U.S. medical schools in 1976-77 was 58,266, an increase of 2,022 over the previous year.

First-year enrollment increased from 15,351 in 1975-76 to 15,667 in 1976-77, the AMA reports. The number of graduates increased from 13,561 to 13,607.

The total number of women enrolled in 1976-77 was 13,059, an increase of 1,532 over the previous year.

There were 41,394 full-time faculty members in the schools in 1976-77, for a ratio of 1 teacher for each 1.4 students. In addition, more than 80,000 physicians and others taught part time.

The total new enrollment of 15,667 students was selected from a total of 42,155 applicants. For the second time in as many years, the number of applicants declined slightly, from the peak of 42,624 in 1974-75. Each applicant applied to an average of almost nine different schools in the same time, hoping for acceptance by at least one.

By 1981-82, the 116 medical schools projected a first-year class of more than 16,000, with more than 16,000 graduates each year. Some additional medical schools will be in operation by that time.

Ethnic minorities enrolled in medical schools in 1976-77 totaled 4,841, a percentage of 8.2.

A total of 494 U.S. students in foreign medical schools managed to transfer to American schools with advanced standing at various levels.

Family medicine is now offered as a distinct discipline in 102 of the 116 medical schools.

In the field of graduate medical education, there was a decrease in the number of foreign graduates serving in housestaff positions in U.S. hospitals. Total at the start of 1977 was 15,097. There were 42,903 graduates of U.S. medical schools serving as interns or residents.

In the area of continuing education for physicians, 59,067 doctors had earned the AMA Physician's Recognition Award by Jan. 1, 1977, certifying that they had attended courses or conducted other studies to keep abreast of new developments in medicine. Some states are beginning to require continuing education for renewal of licenses. Some state medical societies and many medical specialty organizations are requiring formal continuing education for members.

Television and Children

ELI A. RUBINSTEIN, PH.D.

I would like to begin by making an obvious generalization, but still one that deserves some comment. Television is neither the *most* influential nor the *least* influential factor in the development of an American child today. The statement is not as meaningless as it sounds, because television officials seem to believe that criticism of TV violence and other concerns about TV presuppose the assumption that TV is the most important variable in influencing children. By the same token the critics of television seem to assume that the TV officials hold the premise that TV is harmless entertainment and is really an unimportant influence on children. As in most other circumstances where there is a strong public debate, the truth lies somewhere in between.

Let me begin my remarks by reviewing what the scientific evidence tells us, what that evidence implies about the effects of television viewing on children and then, most importantly, what policies and procedures seem most appropriate to increase the value of television in the lives of all of us.

In any proper evaluation of television's effects on children, it is necessary to make a distinction at the outset between television and other mass media. Television is not the same as going to the movies. Television is not the same as reading fairy tales, or other books. Television is not the same as radio. And television is certainly not the equivalent of going to the theater and watching a play by Shakespeare. Television incorporates attributes of all these other media and then adds another dimension because of its total accessibility, its pervasive use and its combination of visual and aural impact.

By now, all of you have heard the statistic that an average American child of 18 has spent

Television is neither the most influential nor the least influential factor in the development of an American child today. . . . [It] incorporates attributes of all . . . other media and then adds another dimension because of its total accessibility, its pervasive use and its combination of visual and aural impact.

more time in his or her young life in front of a television set than in a formal classroom. You have also heard that TV violence produces aggressive behavior in children who watch that kind of program. And you have undoubtedly heard that the average child sees about 20,000 commercials a year on television. In fact, these statistics have become so widely known they were part of a prime-time TV drama just last week. The plot unfolded on the question of a TV writer's responsibility for the death of a 12-year-old boy in a fire he presumably started in school after seeing an arsonist do his thing on television. And, of course, you all know about the related real-life murder trial here in Miami just two months ago. The defense pleaded temporary insanity due to "involuntary subliminal television intoxication" for an adolescent boy who killed an elderly woman. While the jury rejected that defense, it sets a legal precedent which may well be repeated in future trials.

The scientific evidence on the issue of TV violence is not unequivocal and it does not provide support for the contention of "involuntary subliminal television intoxication." Nevertheless, research to date has repeatedly documented that children learn from television. The preponderance of experts in TV research have demonstrated that children who watch TV violence are more prone to act aggressively than children who do not watch programs with violent content.

Some people believe that it works the other

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Presented at the 31st Winter Scientific Meeting of the American Medical Association, Miami Beach, Dec. 13, 1977.

way; that is, children who have a propensity to behave aggressively are more likely to watch TV violence. The research findings are somewhat complicated. Violent programs tend to be preferred by boys, by lower socioeconomic class children, by older children, and by children who are prone to act aggressively. At the same time, the evidence clearly shows that over and above any prior aggressive tendencies, a significant proportion of children do show increased aggressive

There is significantly more violence on television than in real life, by a ratio of many times to one. . . . Children who watch TV violence are more prone to act aggressively than children who do not watch programs with violent content.

behavior subsequent to watching portrayals of violence on television. The report of the surgeon-general's committee in 1972 stated that there was evidence of a causal relationship. It is important to recognize that the committee's conclusion was reached because of a convergence of findings from a variety of independent studies, both in the laboratory and in field investigations.

Some people believe that when children—or adults—watch TV violence it acts as a cathartic influence by releasing aggressive feelings and thereby relieving any aggressive tensions. The research findings do not support this belief. In fact, among the most widely accepted positions by the TV researchers is the conviction that there is no scientific support for the so-called catharsis hypothesis.

Some people believe that television just mirrors the violence in our society and that it would be a distortion of reality if TV violence were eliminated. The research findings indicate that there is significantly more violence on television than in real life, by a ratio of many times to one. In fact, one of the more insidious effects of the continued emphasis on TV violence is reflected in the finding that heavy TV viewers, both children and adults, see the world in a much more sinister light than individuals who do not watch as much television. Even controlling for sex, age, education and race, heavy viewers have an outlook on the world which assesses external circumstances and other people with greater distrust than do the light viewers. Furthermore, in a recent national survey of children, about 25% said

they feel afraid of TV programs where people fight and shoot guns. Children who were reported to be heavy TV watchers were twice as likely as other children to report that they "get scared often."

An interesting contrast to the findings about TV violence comes from research which was stimulated by the work on TV violence. What we found is that children can learn and model all the behaviors shown on television. That means that children can learn positive behavior as well as aggressive behavior from watching television. Incidentally, this finding highlights an important point about the major direction future research should pursue. We should be concerned about finding ways for constructive change. We should focus more on what *can* and *should* be done in the way of change, rather than on what *should not* be done. We can all benefit more by prescription than by proscription.

It is in that positive vein that research on television's influence on prosocial behavior has been most encouraging. Studies done both by scientists working for the networks themselves, as well as by independent scientists, have shown that children will demonstrate helping behavior when they have been exposed to similar positive behavior in programs on television. Furthermore, research has shown that children are able to verbalize the prosocial themes on these programs. A good example of a program that stimulates such prosocial behavior is *Mr. Rogers' Neighborhood*. Over many studies it has been shown that exposure to that series results in increases in positive interpersonal behaviors, task persistence and to decreases in aggression.

It is ironic that concern has been expressed about this new emphasis on prosocial values on

It is important that we recognize propaganda even when it is unintended and labeled as entertainment.

TV. There is some fear that any single set of values imposed on children, even so-called positive values, is a form of behavior control. Such concerns seem to me to be quite premature, especially when the clear effort in stimulating prosocial programming is not to espouse some artificial or imposed values, but rather to encourage a diversity of behaviors and to demonstrate that there are other ways to deal with

interpersonal conflict than by aggression. It seems far from behavior control for example, when Mr. Rogers encourages such attitudes and behaviors as sharing, cooperating, showing affection, verbalizing one's own feelings, trying to understand the feelings of others, expressing sympathy, accepting rules, coping with frustration, controlling aggression, persisting at tasks, delaying gratification and learning to value the uniqueness of others. If research and quality programming can help to increase those behaviors and attitudes, I believe all of us will benefit greatly in responding to such messages more successfully than now seems to be the norm.

Another area of research that has been growing in the recent past deals with the effects of stereotypic portrayals on television. What does it do to children to see certain ethnic groups presented in some biased or restricted way? What do children learn about sex roles when television shows sex roles which are heavily stereotyped? Up until recently, such stereotypes were the rule rather than the exception. For example, males on television are generally employed and hold prestigious positions such as doctors, lawyers and law enforcement officials. In contrast, most women on TV are assigned marital, romantic and family roles. Only one third of TV roles having a definite occupational activity are held by women and these jobs are rarely prestigious ones. Males are portrayed as more powerful, aggressive, stable, smarter, and more persistent than females. Females are portrayed as peaceful, rule-abiding, passive and deferent. Women are shown striving for a dependent role, while men seek power.

Up until recently blacks on television were shown in minor roles and with lower social

Research has clearly documented the need for concern about TV violence. The evidence is very much less apparent regarding sex on television. In fact, explicit sex on television just does not exist.

status, even more so than is actually the case. Pressure from minority groups has produced some reduction in these stereotyped presentations. The constant exposure to all these stereotypic models cannot help but influence children toward believing that real people also behave in these stereotyped ways. In the old days we used to

call this propaganda and it was deplored. It is important that we recognize propaganda even when it is unintended and labeled as entertainment. It can be just as insidious when it is inadvertent as when it is purposely done.

I want to mention briefly two more areas of research, both of which are quite recent. One is sex on television and the other is the effect of TV advertising on children.

Concern about sex on television has often been linked with the issue of TV violence. Sex

As children get older, and beginning as soon as the second grade, they begin to distrust the messages they receive from commercials. . . . That cynicism must surely color the attitudes and beliefs . . . in real life.

and violence on TV are both the focus of criticism by many groups. Research has clearly documented the need for concern about TV violence. The evidence is very much less apparent regarding sex on television. In fact, explicit sex on television just does not exist. What is increasingly programmed is a lot of verbal innuendo, much kissing and embracing and a lot of implicit discussion and/or reference to various aspects of physical intimacy. But, if you use the criterion of sexual presentations such as define an "R" or an "X" rated movie, there is no comparable level of sex on television programming. And yet, there is increasing concern about sex on TV because of what seems to be greater use of sexual themes in television entertainment. It is common belief that, as the pressure against TV violence increases, the networks will turn to sexual themes as an alternate to hold the audience's attention. Objective evidence on such assumed trends can only come from careful study.

In my own laboratory, my colleagues and I recently published one of the few studies about sex on TV. Looking at programs which were aired on prime-time during the 1975-1976 season, we found that physical intimacy appeared in much less intense forms than one would expect from the public criticism of the portrayal of sexuality on current television programming. What has happened in programming in the last two years since we originally collected our data? That is a question that needs an objective answer. I am pleased to tell you that, under the sponsorship of the AMA, we are now exploring that issue.

We just completed taping one full week of evening prime-time programs on all three networks. We have also included all of Saturday morning programs on the three networks. Program content will be analyzed in the same way we did two years ago. We will thus be able to document any changes in levels of physical intimacy since the 1975-1976 season. We will also analyze the characteristics of the individuals involved in these programs so as to get a more comprehensive picture of the portrayal of sexuality.

In a related study we will explore what aspects of these sexual themes seem to be objectionable to the general public. After coding all the programs, we will show a random sample of the programs to various groups of adults and ask them to identify which aspects, if any, they find objectionable, for young children, for teen-agers and for adults. It is important to know the public's reaction to the new programming and to identify those aspects which seem to provoke the audience. It is in the detailed analysis of that public reaction that some important insights about public sensitivities should be revealed.

The average child watches as many as 20,000 commercials a year. . . . We know relatively little about the effects of those verbal messages except that they sell a lot of [things].

The last aspect of research on television and children I have time to mention involves advertising. I mentioned earlier that the average child watches as many as 20,000 commercials a year. That adds up to a lot of very persuasive verbal messages. And yet, we know relatively little about the effects of those verbal messages except that they sell a lot of cereal, a lot of toys, a lot of chewing gum and a lot of toothpaste. In addition, children see a lot of commercials not intended for them. Research on the effects of television advertising on children is still in its very early development. A recent comprehensive review of the field published by the National Science Foundation cites only 21 studies which were felt to be important enough to be summarized.

The NSF report confirms the fact that television advertising does influence children. The intended effect is to get the child to buy the product or to subtly influence the parent to buy the

product. That intended effect is clearly achieved. There are also some interesting unintended effects. As children get older, and beginning as soon as the second grade, they begin to distrust the messages they receive from commercials. By the time children reach sixth grade that distrust is quite common. That cynicism must surely color the attitudes and beliefs children have about what they see on TV commercials—and perhaps about other things they see on television and in real life.

Another unintended effect is the commercial's effect on parent-child relations. Advertising codes clearly prohibit any overt pressure to purchase in children's advertising. This constraint notwithstanding, children obviously do ask their parents to buy what they see on television. Recent surveys of parental attitudes found that three out of four parents have negative reactions to children's commercials. The most negative attitudes were expressed among parents of children aged 5 or less. However, parents are not sufficiently exercised to wish to ban commercials.

What is perhaps most clear from the limited research already done on children's advertising is that there is still a great paucity of facts on which to base adequate guidelines for truthful, accurate and fair advertising to children. Existing guidelines, promulgated both by the National Association of Broadcasters and by the Council of Better Business Bureaus, are valiant attempts to safeguard children against inappropriate advertising practices. Unfortunately, many of the guidelines are based on common wisdom rather than scientific fact. What we need is a lot more good research so that we can better understand the whole process of consumer socialization and how that socialization takes place in children. We need to assess the role of advertising as it interacts with other influences upon the child. We need to know the impact on adult behavior of these childhood experiences with television commercials.

Which brings me to the first of my recommendations as to what to do. Up until now, a great deal of attention has been paid to TV violence. A considerable amount of research has focused on that issue. I believe such research has correctly alerted the public to the potential danger of excessive TV violence. And I believe that the networks are beginning to respond to the public concern about TV violence. The AMA, the PTA, organizations such as Action for Children's Television have all properly voiced that

public concern. So, here is a case where adequate research is available and action is now taking place. But there are many other areas, such as those I have just covered, in which relatively little good information is available. I believe a great deal more needs to be known about the effects of television on the entire socialization process of young children. At a major conference held just two years ago, a whole series of priorities for new research was produced by representatives from the academic community, the public sector, federal and private funding agencies, and the television industry itself. The published report, called "Television and Children, Priorities for Research" is a blueprint for future research, which needs to be implemented. Significant amounts of new funding should be provided from public and private sectors for such research.

The television industry itself, which has the most to gain from such research, should be a leader in supporting it. At the present time, American broadcasting is a \$10 billion a year industry. If even one tenth of 1% of that total was devoted to social research, there would be an additional \$10 million annual budget for that research. In the past five years the three networks combined have spent less than \$1 million per year for such purposes and most of that amount has been on TV violence. There is no indication that they intend to spend significant amounts of money on research in these new areas. I believe they should sponsor such research.

Under ideal conditions, officials of the television industry should see themselves as part of a helping profession and they should be willing and eager to increase their effectiveness by producing new knowledge through research. As the medical profession knows, research is a continuing process. There are no final answers. Good research is the avenue to better medicine. Good research can also be the avenue to better television.

What do we do, however, until that good research and better television is developed? I believe all of us must take television more seriously. Television is not just a casual part of our daily lives. For children, and for all of us, television—as one of my colleagues has labeled it—is the "anonymous teacher." Television *demands* attention and, as such, it *deserves* attention. Parents should be more concerned about what their children watch and how much they watch. They

should encourage watching programs they want children to see and try to discourage viewing programs they think children, especially younger children, should not watch. They should talk about television with their children and try, when possible, to watch with their children. Using television actively, as a part of the parent-child relationship, rather than as a convenient babysitter, will help to make television a more positive force in the home.

As citizens, all of us can make our voices heard in constructive criticism about television. A number of major national groups, including the AMA and the PTA, are now actively involved in looking at television's influence on the mental health of our children. Over the past two years the AMA has taken a number of important steps toward a coordinated program of activity to help improve the role television plays in our lives. By identifying television violence as an environmental hazard, by sponsoring new research, by holding training sessions about tele-

All of us must take television more seriously. Television is not just a casual part of our daily lives. . . . [It] is the "anonymous teacher". . . . As such, it deserves attention.

vision's effects and by providing educational materials about television, and by publicly voicing its concerns for better television, the AMA is serving as an important catalyst for better television. Each of you, as individuals, can participate in this effort both through the AMA and independently. Write your local stations about what you particularly like or dislike in the way of programming. It is the local station which has the license to broadcast and is, therefore, the most sensitive to audience criticism. Send copies of your letters to the FCC, which is the federal agency that issues the license. Let the sponsors of particular programs know when you particularly like or dislike a program in which their advertising appears.

Join an organization which is involved in trying to improve television. In addition to the AMA and the PTA, various national civic and church groups are active in such efforts. One of the most effective of such groups is Action for

Continued on page 130

More Principles of Medicine

ROBERT MATZ, M.D.

The response to the "Principles of Medicine" (*J Tenn Med Assoc* 70:261-263, 1977) has encouraged me to try again.

1. Specialization:

- A. Specialization creates expertise of the irresponsible follow-the-leader type.
- B. Find an irrelevant incompetence, and practice it diligently.
- C. There is only one thing more foolish than to think that one's own specialty can solve all problems, and that is to think that another specialty can.
- D. It is relatively easy to become a competent specialist, but it is much more difficult to become a good physician—and it takes much longer.
- E. *Leary's Law*. If you're a failure at everything else, you can always be a consultant.

2. More Murphy's Laws:

- A. Everything is always worse than you thought it was going to be.
- B. Nothing is ever as simple as it first seems.
- C. If you tinker with something long enough you will break it.
- D. Everything costs more than you first estimated.
- E. It is easier to get involved in something than to get out of it.
- F. If you look for trouble you are sure to find it.

3. To err is human. To forgive is against departmental policy.

4. The common cold: treated it lasts for two weeks; untreated, a fortnight.

5. Some physicians believe that insight is the most valuable thing they have and therefore should be used sparingly.

Acting Director of Medicine, North Central Hospital, and Associate Professor of Medicine, Albert Einstein College of Medicine.

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6. Worry is a device of nature to make us try to do our best.

7. A conclusion is the place where you got tired of thinking.

8. Obesity:

- A. To live and be fat is better than not to live at all.
- B. To live and be lean is better than to be fat.
- C. What we eat will determine what we weigh until the second law of thermodynamics is repealed.
- D. The only glands malfunctioning in obesity are the salivary glands.
- E. Imprisoned in every fat man, a thin one is wildly signaling to be let out.

9. No one is ever old enough to know better.

10. A. No one betrays himself by silence.
B. A closed mouth gathers no feet.

11. As teachers we pay too much attention to the bucket function of the mind and not enough to its searchlight function.

12. Those who welcome death have only tried it from the ears up.

13. To profit from good advice requires more wisdom than to give it.

14. There is nobody so irritating as somebody with less intelligence and more common sense than we have.

15. Progress might have been all right once, but it went on too long.

16. A. Too many scientists offer answers before they understand the questions.

B. It is better to know some of the questions than all of the answers.

17. **Another Peter Principle.** Most hierarchies were established by men who now monopolize the upper levels, thus depriving women of their rightful share of opportunities for incompetence.

18. Logic is the art of going wrong with confidence.

19. Man is nature's sole mistake.

20. Growing old isn't so bad when you consider the alternative.

21. If you actually look like your passport photo, you aren't well enough to travel.

22. **Maier's Law.** If facts do not conform to theory they must be disposed of.

23. He that relieves pain is blessed, but he that causes none is doubly so.

24. Where all think alike, no one thinks very much.

25. Minds are like parachutes; they only function when open.

26. Success covers a multitude of blunders.

27. God couldn't be everywhere, and therefore He made mothers.

28. A good listener is not only popular everywhere, but after awhile he knows something.

29. **Roger's Rule.** The trouble with people is not that they don't know, but that they know so much that ain't so.

30. Since scientific evidence on the one hand points in one direction and on the other hand points in another direction, one critic called for "one-armed scientists."

31. Nothing appears to achieve existence until it is labeled, and a condition springs into being as soon as a name is given to it.

32. A profession is a group of individuals largely, if not solely, concerned with preserving its own status.

33. The well-trained physician knows what to do for his patients; the especially well-trained physician knows what not to do.

34. **Shoemaker's Dictum.** It is unwise to monitor patients to achieve normal values because that will erase compensations that have survival value. The proper objective of monitoring is to achieve survival.

35. **Principles of Intensive Care:**

A. Air goes in and out.

B. Blood goes 'round and 'round.

C. Oxygen is good.

36. Darwin had it all wrong. It's going the other way!

37. Retrospective analysis is an exact science.

38. What good is willpower when you've got diarrhea?

39. When a patient on a drug—on any drug—becomes ill, the Napoleonic Code rather than the English Common Law should apply: the drug should be presumed guilty until proved innocent.

40. **Chalmer's Principle.** The smaller the number of patients you want to study to show

the wonderful effects of your new discovery, the more urgent it is to have controls.

41. **Muench's Second Law.** Results can always be improved by omitting controls.

42. To refer to only one authority is a form of plagiarism, whereas to refer to many authorities is accepted generally as a form of research.

43. **Bernstein's Precept.** The radiologists' national flower is the hedge.

44. **Cochrane's Aphorism.** I was brought up in an older tradition. I was told, "Before ordering a test decide what you will do if it is (1) positive, or (2) negative, and if both answers are the same don't do the test."

45. **Shinya.** There are few more dangerous instruments than a probe with no brains behind it.

46. **Bywaters.** Observers may be grouped as those with enthusiasm and no controls and those with controls and no enthusiasm.

47. The narrower the mind the broader the statement.

48. Physicians should not become discouraged when their instructions to patients are not carried out. Dr. Frank Gilbreth used to say, "After all, what success did God get with the Ten Commandments?"

49. The fact that the dog has lived at man's heel in cave and cottage since the dawn of time has not made him behave physiologically like his master. Few animals have misled pharmacologists so consistently; except, of course, the rat.

50. Unfortunately, if a patient is unconscious, his osmostat resides in his physician's head.

51. You won't cure many of them; you won't even know what's wrong with some of them; but you can always be kind to them.

52. As yet no drug has been found with a single action and no human body with a single reaction.

53. Diabetic control, like virtue, is easier to talk about than to define or achieve.

54. **Medical Modifications of Parkinson's Laws:**

A. The staff of a hospital increases by geometric progression regardless of the work demanded of it.

B. Hospital activity increases to occupy or overfill the beds, outpatient department sessions, and supporting services provided.

55. Pray to God, but make sure you pick a good internist.

56. Little minds will still be little, even when they are made professors.

57. If people cannot write well, they cannot think well, and if they cannot think well, others will do their thinking for them.

58. Be careful of your thoughts; they may break into words at any time.

59. Better to remain silent and be thought a fool than to speak up and remove all doubt.

60. Today's therapeutic innovation is likely to result in an infection tomorrow.

61. Learn from your errors, and may they be few.

62. Many clinicians view research in cardiac metabolism the way farmers view studies of the earth's core: It doesn't help much with the plowing.

63. During the course of social evolution the human conscience has become a vestigial organ.

64. If you must use placebos, for God's sake always make sure that those you use really do work!

65. Those who think they know it all upset those of us who do!

66. Experience is the name everyone gives to their mistakes.

67. The expert is seldom in doubt but frequently in error.

68. **Osler.** You should not prevent patients from getting well on their own.

69. **The Palmer Principle.** The man who

knows not and knows not that he knows not is dangerous.

70. **Herbert's Homily.** The only thing I know that is autoimmune is the local drunk who staggers across the street to the bar three times a day and doesn't get hit by a car.

71. Any fool can cut off a leg, but it takes a surgeon to save one.

72. It is nice to be important, but it is more important to be nice.

73. **Sattinger's Laws:**

A. If it doesn't work, we need a new one.

B. It works better if you plug it in.

C. If at first you don't succeed, try looking in the wastebasket for the directions.

74. Listen to the patient—he is telling you what is wrong.

75. Medical care need not always mean the attempt "to rescue the perishing" . . . but does always mean "to care for the dying."

76. **Definitions:**

A. *Neurology.* The differential diagnosis of incurable diseases.

B. *Internal medicine.* That branch of neurology that deals with other systems.

77. Mother Nature is a bitch!

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Television and Children . . .

Continued from page 127

Children's Television, which began almost ten years ago in Boston and is now a major national influence toward better programming. ACT has chapters in all major cities and has played a critical role in improving the quality and decreasing the quantity of advertising on children's shows. The efforts of this group of concerned citizens have clearly produced changes for the better.

While it is clear that research has told us a great deal about television and children, it is equally clear that there is much we don't know and much that needs further exploration. It is also important to point out that television, as a public commodity, needs more concerned public

attention. Just as being a good citizen requires your time and attention and participation in the political process, so being a good television viewer requires your time and attention and participation in improving the quality of American television. Merely turning that switch on and off a couple of times a day does not give you an effective voice in television any more than voting once every four years in a presidential election satisfies your responsibilities as a citizen.

In the lives of any one of us, television may not be of great significance. In the lives of all of us, and especially our children, it is of much significance. We should give it the attention it deserves.



DAVID H. TURNER

Payment for Physicians' Services: Assignments—Contracts

In March of 1977 a report was made by the Department of Health, Education, and Welfare which listed the names of physicians who had received more than \$100,000 in 1975 as income from the Medicare program. There were many errors in this list, and only after strong protest by the American Medical Association and many individual physicians was a corrected list reported, along with a token apology by Secretary Califano.

I can think of no benefit gained from publishing such a list except for those who desire to embarrass some physicians. Its cost must have been very high because the HEW admitted that preparing a corrected list cost the taxpayers several hundred thousand dollars.

Secretary of HEW Califano has said, "It is my strong belief that one of the problems that plague the health industry is the lack of information about the financial aspects of it; not simply *payments made to doctors under Medicare*, but payments made to hospitals, payments made to nursing homes, payments made to all kinds of providers; and we intend to publish more and more of that information as time goes on, without waiting for the press to make freedom of information requests for it."

President's page

It is my strong belief that we in medicine should make a freedom of information request of the HEW for publication of the costs of administration of the Medicare and Medicaid programs. It is rather obvious that in all press releases from HEW having to do with cost, the cost of administration is overlooked or played down. We who are in the private practice of medicine know that even if HEW published its administrative cost figures they could not possibly determine the total cost increases in each physician's office brought on by increased paperwork.

It is important that we physicians not lose sight of the fact that the federal government, through HEW-Medicare, has a contract with the patient, and you *do not become* a party to that contract until you sign on the insurance form that you will *accept assignment*. When you do this, *you* are contracting with the third party payer.

When Secretary Califano speaks of *payments made to doctors under Medicare* he is referring to payments made directly to doctors who have accepted assignments.

It seems simple and obvious to me that the time-honored principle of the physician being responsible to the patient for medical care and the patient or the patient's family being responsible to the physician for payment of the bill is the best method. The patient who is poor and unable to pay has always received special consideration by practitioners of medicine, and this principle should continue. Assignments should be accepted on the people covered by Medicaid, but Medicare patients should be allowed to collect their payment from Medicare and then pay the physician for his services. In this way the responsible relationship remains between the patient and his physician.

A recent occurrence in Michigan has focused attention on the problem of physicians contracting with third party payers. We are fortunate that the situation in Tennessee is different from that in Michigan. The Michigan Blue Cross/Blue Shield has contracts in which physicians sign up to be participating physicians. In doing this the physician agrees that the fee paid by Blue Shield will be his full fee. It came as a surprise to the physicians of Michigan that the Blue Cross/Blue Shield had negotiated with the United Auto Workers and Automobile Manufacturers in Michigan for vision and hearing insurance benefits without consulting the physicians or the Michigan State Medical Society (MSMS).

The MSMS House of Delegates met in special session and authorized the society to sue Michigan Blue Cross/Blue Shield, urging unions and businesses to seek its advice before buying Blues insurance. If necessary, MSMS will drop its own health insurance program with the Blues and call upon its 8,700 physician members to cancel their service agreements with the state's largest health insurer.

The medical society took this action saying that the Blues are attempting to control rising costs of care by inducing more physicians to sign participation contracts, in which whatever the Blues pay will be accepted by the physician as full payment for their services, and by instituting changes in the payment process to financially favor physicians who have signed such agreements. The MSMS delegates view this policy as an effort by a nonphysician group to exert control over physicians' finances and practices, and the society hopes to prove to a court that the Blues' actions are illegal. The state's physicians feel that eventually the Blues will reimburse only those doctors who sign agreements to accept the Blues reimbursement as payment in full. The physicians voted to increase their membership dues by \$35 a year to finance possible future lawsuits.

We do not believe that such a bad situation can come about in Tennessee since the Blue Shield "Tennessee Service Plan" was wisely discontinued May 1, 1967. When you accept assignment from Blue Shield in Tennessee, or any private health insurance carrier, you are not signing a contract to allow the carrier to determine what your fee will be, but when you accept *assignment from Medicare* you are bound by law to accept as full payment the fee as determined by Medicare.

Sincerely,

David H. Turner, M.D.

PRESIDENT

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FEBRUARY, 1978

In about 1946, just after World War II, television burst onto the world scene practically full-grown, and in a very few years a new industry had reached monstrous proportions, at least in this country. Soon much of the material was on film, so that telecasters could be more selective. Videotaping has opened up all sorts of possibilities for storage and replay, and most recently satellite telecasting has brought not the world just past but the world present into every living room.

Or more properly, it brings the world present as the industry wishes it to be seen. Never in history has the potential for manipulating beliefs and attitudes been so all pervasive. It is another clear case of technology outstripping spiritual capabilities, and the results are terrifying.

Elsewhere in this issue Dr. Eli Rubinstein, one of the nation's foremost researchers into the effects of television, has addressed some of the problems we face because of our children's "anonymous teacher." I wish here to deal with some other aspects of television, some of which are only just beginning to be appreciated.

The above quotation from Harold Innes is undoubtedly correct except for one word, and I wonder when he made the statement. The word "advantage" is suspect in this context. It should have been apparent from the first.

Unlike other media, television has the capability of repeatedly forcing a message into the viewer's brain without giving him the opportunity to think about it. Whenever you read a passage or an advertisement, you can stop and consider its implications and make comparisons out of your own experience. Not with TV. If you watch a football game, you will be told probably at least ten times that any athlete worth his salt, who cares anything at all about his fellow man, uses "Nostink" deodorant. You may tune it out five of the ten times, but you will see it enough that your *subconscious* begins to believe that "there's no stink like Nostink," and next time you're out you buy some and you're hooked—not your rational you, because he was given no chance to operate. Your subconscious rules. You must make a conscious effort to override. Usually we don't.

Technology is widely considered to be neutral—to be useful for good or evil, but in itself, neutral. In his book *Four Arguments for the Elimination of Television*, to be published in March by William Morrow and Co., Jerry Mander argues that

editorials

A Huge Wanting

The advantages of a new medium will become such as to lead to the emergence of a new civilization.

—Harold A. Innes

Now that's what television gives you—a huge wanting and nothing to show for it but more of the same.

—Norman Mailer

television is not reformable, that its problems are inherent in the technology itself. He points out that as military technology—armies—is designed for fighting and winning wars, one is unlikely to find among those who use the technology and are good at it—generals—very many humanistic, loving pacifists. Maybe some, but not many. In the same way, television is a natural for those who wish to dominate thought. In accepting television, we have to accept this just as we accept the fact that in order to have nuclear power we have also to accept the fact of a techno-scientific-industrial-military elite to harness and use the power from nuclear reactions and to protect the radioactive wastes. Television will be used, not exclusively, but mostly, by those who wish to sell something—a product or an idea—and who are good at doing it. It is the nature of the technology itself which determines who uses it. It makes its own elite, so that ultimately it is the technology itself which dominates.

The industry grew up with almost no research as to the effects of television on human existence. It was latched onto immediately as a superb marketing tool, but except for marketing research, none was done until the last few years when excessive violence on “the tube” touched off reactions first from angered, concerned parent groups and finally the National Association of PTAs and the AMA. Predictably, the industry itself has done practically nothing about it.

No one really knows what effect all the advertising has on children. Dr. Rubinstein points out that it makes them cynical, and doubtless it does. I note the FDA is now considering limiting TV advertising aimed at children. This would undoubtedly create more problems than it would solve, as it would be just one more incursion into our freedom, and another area of life would fall under the dead hand of bureaucracy. The matter of children’s advertising, though, is just a part of a much larger and even more frightening problem. There is no time to dwell here on more than a few aspects of it.

I should emphasize here a point that both Dr. Rubinstein and Jerry Mander make concerning television, which is that it is tantamount to scandal that there has been so little research not only on the social but on the neurophysiologic aspects of television viewing. There is good evidence that the TV signal itself, because it is an input of a type the brain is not equipped to handle, produces a hypnotic addictive effect. Because what appears on the screen at any one

time is only a single “flying” dot, the image is constructed not on the screen but in the brain. Rather than this construction process being “participation,” as McLuhan claims, it actually eventually overpowers the mind, so that, like the assembly line or the hypnotist’s blinking light, the conscious mind gives up, and is open to all sorts of suggestion as it forgets the process and merges with the experience, unable to separate reality from fiction. In effect the viewer becomes a part of the image. There are all sorts of ramifications of this; they are discussed in detail in Mander’s book, which if you are interested in the problem you should read.

It is not at all apparent to me where television is taking us—note I did not say where we are going—nor do I think anyone can say with certainty how much television has had to do with forming the various aspects of our present life situation, both good and bad. It has done a great deal to standardize living the world over and to erase differences, which has both good and bad implications. Time spent staring zombie-like into “the tube” is for the most part nonproductive, because the image goes into the memory bank without being subjected to conscious analysis unless (1) the program is really educational and (2) viewing is interrupted at the end to assimilate what was seen. Obviously this is impossible with four or more hours of virtually uninterrupted viewing followed by sleep.

It would seem that if present trends continue we are destined to become a world of manipulated, nonrational, sedentary, nonproductive blobs. This is due not only to the content (or lack of it) of what we watch, but also to the nature of the interaction between the television signal and our brains.

The late Fred Allen, that paragon of comedians who also had tremendous perception, said of television that it “is a triumph of equipment over people, and the minds that control it are so small that you could put them in a gnat’s navel with room left over for two caraway seeds and an agent’s heart.” He really had no idea of the extent to which we are influenced by the equipment itself. But if we are controlled by the equipment, we are also controlled by the minds that use that equipment, and they have not shown themselves, by and large, to be as interested in the public weal as in their own bulging back pocket. “Anything that will sell air time” is their rule.

Dr. Rubinstein points out that we must not

take television lightly, and that we should know more about what our children are looking at. To take it a step further though, we need to consider what is being dumped unfiltered into all our brains, and how it is affecting us all and the world in which we live.

You pays yo' money an' you takes yo' choice. What is it? A bonanza? Demonic? Contrary as the opening quotations seem at first reading, I have a feeling both are right, and that at least until now the new civilization the new medium is disgorging, itself produces a huge wanting, with nothing to show for it but more of the same.

J.B.T.

Father Christmas, Ave Atque Vale!

nos-tal'-gi-a (nos-tal'-ji-uh) noun [fr. Gk *nostos*, return home, + *algos*, pain] 1.a *archaic*: a severe melancholia caused by protracted absence from home or native place. b. homesickness. 2. a wistful or excessively sentimental abnormal yearning for return to or return of some real or romanticized period or irrecoverable condition or setting in the past.

To show you how words change, the dictionary I usually use is a handy 1947 Funk and Wagnall's *Collegiate Dictionary* which I got some time after my wife and I set up housekeeping. The only definition it gives for *nostalgia* is 1.a. (above). I figured the new *Webster's Unabridged* should have more, as the word is popular nowadays and is seldom used as meaning severe melancholia brought on by homesickness, which is bad, but as a sort of *gemütlich*, tender feeling (or sloppy sentiment), which is considered good—sort of.

Again sort of—this editorial is sort of about nostalgia, in a sort of reverse sense. It is to say you can't go back, and what's more, you'd better not try if you know what's good for you, and what's still more, you wouldn't like it anyway, because if you can't abide now you didn't like then either—you only think you did. Now that's a right involved sentence, but it will either do you good to work through it or it will give you a chance to forget the whole thing right now.

This editorial actually is for me. I'm tired of writing Thanksgiving editorials in September and Christmas editorials before Thanksgiving (I'm not really, because I could quit), and so I'm writing this Christmas editorial the day after Christmas, which will get it into the February issue, and you can read it next spring or save

it til next Christmas. But you can't go back.

I have both read and written a lot of words about how Christmas isn't what it used to be, and about what it is, what it isn't, and what it should be, and why. First, it certainly isn't what it should be, but then of course it never was. If it had been, the King would have been born in a palace, with all His subjects kneeling around the throne, instead of in a feed trough in a cave used as a stable, with only shepherds as witnesses. So forget about past perfection. In spite of the beauty of the stained glass nativity in our warm, comfortable churches, a barn would be a pretty drafty place for a new mother and child.

When I was a boy free Christmas trees weren't very hard to find, if you like cedar, which until after World War II I thought all Christmas trees had to be. You just had to go out into the woods and cut one, without danger of scalping the earth, as trees outnumbered people by several hundred—or even thousand—to one, unlike now. We had a few bought ornaments, but mostly we made them. I remember very clearly our first string of electric lights, because we had never had lights on a tree before, as my parents considered candles—wisely—a fire hazard.

I like our ornaments and lights. Many of our ornaments have survived over 30 Christmases. I don't really crave "rolling my own" ornaments, though it can be a lot of fun if you set out to make it that. Nor do I mind buying a tree, though they are awfully expensive. But it was fun to go this year (1977, I mean) to a friend's farm in a group and once again cut a tree. It was neighborly of him. It was Christmas!

Our presents were mostly practical, especially during the depression years. Besides the usual clothes, I got a lot of books, and I remember once I got a little crystal radio—a name which would mean nothing today if it weren't for the CB mania. It would receive only one station, but there was only one station to receive. I've watched some of today's TV toys in operation, but I can't see they're enjoyed any more than that radio.

We used to go to my grandmother's for Christmas dinner, along with my numerous cousins. We "got" to eat at another table in another room and were privileged to eat the drumsticks, thighs, etc. Then parents became grandparents, and children parents, and time goes on. It is easy to wish your children to gather wide-eyed again around the Christmas tree before daylight

Christmas morning. That may be the strongest of all Christmas's emotional tugs. But as I said before, if you know what's good for you, you won't try to go back. Because that isn't really what Christmas is about.

At the risk of seeming cynical, I need to say here that because of what it is nothing lends itself more to hypocritical philosophizing than Christmas. Christmas after all is the birthday of the King who freely chose to leave His Kingdom where He was (and is) worshiped and served, and to become a poor man in a minor despised nation. It brought Him only suffering and ultimately death. He did it all for others. And so Christmas really is people—people and God.

The only place we can properly go back to on Christmas is Herod's Bethlehem, and who wants it? Bethlehem points forward in time, and outward from itself. So therefore should Christmas. I am indeed thankful there was that first Christmas, but I have also come to realize that we need to be thankful also that there is *still* Christmas, faults and all. Around our tree this year were sons and daughters and their wives and husbands and children. They couldn't all be there at the same time—but at one time or another they were all there. We need finally to be thankful for whatever Christmas we were given, not the one we wish we had.

We continue to read and hear, and it is certainly true, that we need to broaden our horizons and reach out to those less fortunate, who may have little or nothing. More than anything else we need just to reach out. Period. It is not very hard to love humanity as a mass, and writers and speakers can get all choked up talking about loving their fellow man. It is a lot harder to reach out to individuals, because that requires involvement. It is where most of us fail. It seems to be easier not to fail at Christmas.

Editorials in various papers at Christmastime are filled with exhortations to let the "spirit of Christmas" flow. By "spirit" they mean, "Merry Christmas! Wassail!" There isn't anything wrong with that, but simply because of it the Puritan fathers forbade the celebration of Christmas, as they rightly perceived that the real spirit of Christmas is the Spirit of Him who gave us Christmas, and that unless He comes daily into each life, Christmas remains just a warm feeling for a few days each year, saying in effect, "Be ye warmed and fed."

But better that than not at all.

J.B.T.

The Uses of History

"The evil that men do lives after them; the good is oft interred with their bones." So go the opening lines of Caesar's funeral oration, put into the mouth of Marc Antony by Shakespeare. Antony may have said something like that, though the chances are this is only a bit of Shakespearean philosophy.

In the amphitheater of Vanderbilt Medical School hang the portraits of former deans of the school. When Dr. Ernest Goodpasture was dean and was approached about having his portrait painted, he answered that he would consider it only if it was painted with distintegrating materials so that it would disappear before students and faculty began remarking, "I wonder who that old b...d was." I was reminded of this when it was reported to me that most of the students had never heard of a fairly recently departed very prominent faculty member, though of course neither he nor Dr. Goodpasture had done any evil to be remembered for.

I was interested, therefore, to read a statement in the newspaper that most of our youth, and indeed the youth of Germany, know almost nothing about Adolph Hitler, and most of what they do know is wrong. The article began by quoting from themes written by teen-age dependents of military personnel stationed in Germany, who commonly said things like, "Hitler came to Germany from Italy, invaded Japan, and died before World War II." Their teachers explained that the students are not taught a course in German history. (Of course, as Hitler had nothing to do with U.S. history, why should they be expected to know about him?) The author found further that many of the young people in the United States believe Hitler was a good man because he was "responsible for the Autobahns and built Volkswagens."

Unlike the bard, you might conclude that the good are forgotten, and the evil are remembered for the good they did. I think you would both be wrong.

Caesar was a tribulation to me and to generations of Latin scholars, and an inspiration and genius to generations of military leaders the world over. Today he (Julius) seems to be confused in popular thinking with a lot of subsequent Caesars, and I suspect is known best because Caesar's Palace in Las Vegas is named for him (or maybe Nero). Even caesarean section is no longer capitalized, and it may not be remembered

much longer that it is so called because Julius Caesar is said to have been born that way. His memory is kept alive by the occasional showing on TV of George Bernard Shaw's *Caesar and Cleopatra*, which presents Caesar as a kindly, peace-loving philosopher. History shows he was nothing of the sort. The play actually was written as a vehicle for Shaw's anti-war sentiment, and shows what can be done to history for propaganda purposes.

Those of us who are interested in history are known politely as history buffs, and less politely as history nuts. In spite of a short historical renaissance with the Bicentennial, the majority of the people consider history a bore, and what is remembered is what the historians want remembered, based on whatever primary source material is available to them.

History has both positive and negative aspects, and one man's meat is another man's poison, which leads to two problems. The first is that primary source material consists of documents and witnesses, and witnesses are largely unreliable, first because the way in which an event is viewed depends upon the background, loyalties, and make-up of the viewer, and second, because memories fade and are colored by subsequent events. So we have only documents to depend on. These include newspapers, which often reflect not only personal bias but also deliberate falsification at the source. Firsthand information is therefore very scarce and often suspect, and it also is subject to interpretation, which is the second problem.

As an example, there have been a number of biographies of Hitler, all of which reflect the personal bias of the writer. One has now been written which absolves him of any responsibility for the murder of six million Jews, which everyone over 50 years old knows to be a bald-faced lie. But the book will be around when we're gone. We are at the mercy of people who write books, and of reviewers without the wit to write books.

History gets rewritten not only because of personal bias, but by governmental edict, witness "de-Stalinization" in the Soviet Union, and by the withholding or falsification of official news releases, witness Watergate.

In growing up, each of us makes mistakes, and whether or not we listen to advice, we have to try some things for ourselves. We may have to find out that fire will burn us. But once burned, only a fool would believe someone who said, "Sure it burned you once, but that doesn't mean

it will burn you again." We call that learning from experience. It is good, and is maturing. It keeps us from making the same mistake twice.

Question: Why is experience good, and history (which is corporate experience) considered of no value? Maybe the answer is that the truth is hard to come by secondhand. It seems it always has been. But the lessons of the past, whether individual or corporate, need to be remembered to avoid repeating them. Nowhere is this more important than in medicine and matters of health generally. It is critical to get the facts straight the first time, and to transmit them accurately. It is equally important to resist any tampering with them from whatever source and to forcefully call attention to it when it happens. It is the responsibility of all of us.

I wonder if those teachers told their students Hitler wasn't born in Italy, didn't invade Japan, wasn't a Communist, and didn't die before World War II. More to the point, I wonder if they knew it themselves.

J.B.T.



Isham Monroe Cox, age 53. Died January 3, 1978. Graduate of University of Tennessee School of Medicine. Member of Roane-Anderson County Medical Society.

Hugh W. Rule, age 54. Died December 20, 1977. Graduate of University of Virginia School of Medicine. Member of Sullivan-Johnson County Medical Society.

new members

The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY

Jack D. Hixson, III, M.D., Chattanooga

personal news

Robert G. Allen, M.D., Memphis, who performed the first open heart surgery in Memphis in 1959 at LeBonheur Children's Hospital, has been elected the hospital's chief of staff. Other officers chosen

were *Lloyd V. Crawford, M.D.*, chief of staff-elect; and *Aram S. Hanissian, M.D.*, medical staff secretary.

Anne U. Bolner, M.D., Fayetteville, has been re-named chief of staff at Lincoln County Hospital. Other officers named were *T. A. Patrick, Jr., M.D.*, vice-president; and *Donald R. McCauley, M.D.*, secretary, both of Fayetteville.

Charles Hamilton, M.D., Nashville, has been chosen president-elect of the Nashville Academy of Medicine for the coming year. He will succeed *John Sawyers, M.D.*, 1978 president, in January 1979.

Robert H. Hutcheson, Jr., M.D., Franklin, accepted a Centennial Award given posthumously to his father, *Robert H. Hutcheson, Sr., M.D.*, who served public health for 38 years. Dr. Hutcheson's award recognized his 26 years as commissioner of public health as well as director of the Williamson County Health Department most of that time.

Jerry L. Kennedy, M.D., Tullahoma, has been re-elected chief of staff of Harton Hospital. This is Dr. Kennedy's fourth consecutive one-year term. Also elected were *Ralph L. Brickell, M.D.*, vice-chairman; and *C. B. Krishna, M.D.*, secretary-treasurer, both of Tullahoma.

Donald Larmee, M.D., Knoxville, has been elected chief of staff of the Medical and Dental Staff Association of East Tennessee Children's Hospital. Other officers elected for 1978 were *Carl Godfrey, M.D.*, chief of staff-elect; and *Martha Bushore, M.D.*, secretary, both of Knoxville.

Oscar M. McCallum, M.D., Henderson, has been appointed to the Commission on Public Health and Scientific Affairs of the American Academy of Family Physicians.

Alfonse T. Masi, M.D., Memphis, has been elected president of the medical staff of the City of Memphis Hospital. During the hospital's annual medical staff dinner and election in December, four doctors were given distinguished service awards for their contributions to the development of a primary care program in the Memphis area. Awards were given to *John W. Runyan, M.D.*, chairman of the community medicine department at UTCHS; *George S. Lovejoy, M.D.*, Health Department director; *Iris A. Pearce, M.D.*, medicine service official at Gailor Clinic; and *Hershel P. Wall, M.D.*, associate professor in pediatrics and an authority in pediatric primary care.

Claud Taylor, M.D., Cleveland, who recently retired, was presented a special plaque of recognition and appreciation at the Bradley Memorial Hospital's 25th anniversary in December.

William L. Vandergriff, M.D., Knoxville, has been installed chief of staff for University Hospital. Other officers installed were *Rolland F. Regester, M.D.*, chief of staff-elect; and *Charles I. Huddleston, M.D.*, secretary, both of Knoxville.

programs and news of medical societies

Nashville Academy of Medicine

On Jan. 10, 1978, the Nashville Academy of Medicine, in conjunction with the NAM Auxiliary, held its 157th annual meeting at the Hyatt Regency Nashville. It was a fun-filled evening for members and spouses beginning with a social hour and dinner and concluding with entertainment provided by the Mack Magaha Bluegrass Quartet.

During the program, several awards were given. Ronald E. Overfield, M.D., received an Award of Merit for his contributions as a member of the AMA Committee on Services to Young Physicians and for the establishment of membership services for the NAM. The Academy also honored Frances Meeker, staff writer for the *Nashville Banner*, for "outstanding achievement in medical news reporting for the past ten years." Following a memorial observance for deceased members, the Academy awarded 50-year service pins to the following physicians: Julian Gant, M.D., James C. Gardner, M.D., James T. Hayes, M.D., C. Fowler Hollabaugh, M.D., Eugene Regen, Sr., M.D., Daugh W. Smith, M.D., and David Strayhorn, Sr., M.D.

national news

From the AMA's Office in Washington, D.C.

Progress Report—NHI

The first session of the 95th Congress has adjourned and in its wake leaves no major new health legislation. Touted as the "most liberal Congress of recent years" its actions on balance with respect to health legislation proved to be more conservative than liberal.

And both the Congress and the Carter White House have left the question of national health insurance (NHI) legislation next year very much up in the air. Health, Education, and Welfare Secretary Joseph Califano has announced administration-proposed NHI legislation may not be ready until 1979.

Shortly thereafter, however, President Carter reassured United Automobile Workers Union leaders and Sen. Edward Kennedy (D-Mass.) that a full NHI legislative proposal would be forthcoming in 1978—but reaffirmed his intent to first send Congress a statement of principles, followed shortly by a bill.

But meanwhile, back on the Hill, House Ways and Means Health Subcommittee (the key House committee for enactment of NHI) Chairman Dan Rostenkowski (D-Ill.) has cautioned that spiraling health care inflation must be checked before Congress can enact an NHI program.

Private Sector Seeks Cost Cap

In an attempt to do something about that spiraling health care inflation noted by Rep. Rostenkowski, three major health organizations have agreed on a sweeping national program to curb hospital rate increases through a private sector review system aimed at encouraging hospitals to seek efficiencies and to spotlight institutions that fall down on the job.

Responding to a challenge from Congress for a voluntary alternative to the administration's proposed Hospital Cost Containment Act for federal controls, the National Steering Committee has issued a 15-point program featuring a goal of a 2% reduction a year in the rate of increase in hospital costs.

The steering committee was formed by the American Medical Association, the American Hospital Association (AHA) and the Federation of American Hospitals (FAH). In addition to officials of these organizations, members of the committee include officials of the Health Insurance Association of America, the Health Industry Manufacturers Association, the Blue Cross Association, consumer consultant Virginia Knauer, and the U.S. Chamber of Commerce.

At a news conference in Washington, D.C., the members of the National Steering Committee announced their agreement on the 15-point program and urged everyone involved including the public, labor, management and the government to co-operate in the attempt to brake the rise in health care spending.

Robert B. Hunter, M.D., chairman of the AMA Board of Trustees and a member of the committee, told the news conference that physicians and hospital personnel share the public's concern over the cost problem. "We believe the problem can be solved voluntarily better than by government intervention."

Terming the meeting "historic," Michael Bromberg, executive director of the FAH, said the nation's hospitals will be reviewed openly and the identity of hospitals that are overspending will be made public. "In effect this will be peer review out in the open."

Under the program, each state will have a steering committee, composed much like the national steering group, which will receive and review monthly data from hospitals on their cost-efficiency program.

A "very realistic goal" of a 2% reduction annually in the rate of increase over the next two years was set forth by John Alexander McMahon, AHA president. This would slow the rate of increase from the current 13.7% to 11.7% next year and about 9.7% the following year, a level near that of the rest of the economy.

Describing the project as "a more concerted effort than any undertaken before," James H. Sammons, M.D., executive vice president of the AMA, said one of the key programs will be to expand public awareness of the need for cost constraints and cost awareness on the part of consumers as well as providers.

The call for an organized private cost control effort was issued several weeks ago by Rep. Rostenkowski, chairman of the House Ways and Means Subcommittee on Health that had been considering the administration's plan to impose a 9% cap on hospital revenue increases. The strong opposition from provider groups as well as some segments of labor that would be affected stymied the controversial plan this year, but Congress will still have the issue before it when it returns for its second session in January.

Here is the tentative 15-point program agreed to by the National Steering Committee:

- Creation by state hospital and medical organizations of state level voluntary cost containment committees to develop special action programs for their states.

- Immediate reassessment by all institutions of planned budget and charge adjustments to determine what can be done to shave costs in the short run consistent with sound medical practice.

- Make the overall national goal a 2% annual drop in the rate of expenditure hikes for the next two years.

- Set up guidelines for consideration by hospitals and state committees to identify hospitals where special efforts need to be made to cut costs. Under these guidelines, the top 15% of hospitals projecting the highest increases would be reviewed first, as well as others showing a higher than average rise in expenditures.

- As a national goal reduce significantly the rate of the new capital investment by hospitals over the next two years. Also as a national goal—no net increase in the national total of hospital beds with certain exceptions.

- Request that all hospital medical staffs consider ways to further tighten utilization review—consistent with sound medical practice.

- Study and development by state committees of programs to improve productivity in hospitals by 2% a year.

- Accelerate current trends to improve the health delivery system through multihospital systems, shared services, health maintenance organizations and single and multispecialty medical groups.

- Notify all concerned of the national program and urge widest support and cooperation.

- Provision of technical assistance programs by the AMA; the AHA and the FAH to assist the state committees and hospitals in carrying out the program.

- Urge hospital suppliers to support the program and exercise restraint in pricing.

- Establish a subcommittee on public education to actively involve everyone in the program and to explain it to the public.

- Seek the support of the government.

- Call upon insurance carriers, other purchasers of care, industry and organized labor to examine expanded consumer cost sharing, cost effective alternatives to existing coverages, and to carefully review any substantial expansion of existing benefits.

- Seek a review by government of the cost im-

pact of all existing federal regulations, to be completed by the end of next year.

The National Steering Committee is composed of the following: AHA's Chairman-Elect Samuel Tibbitts, president of the Lutheran Hospital Society of Southern California; FAH's President-Elect Andrew W. Miller, senior vice president, Hospital Corporation of America; Dr. Hunter of the AMA; Health Insurance Association of America President Robert Froehlke; Harold Buzzell, president of the Health Industry Manufacturers Association; Blue Cross Association President Walter McNerney; Virginia Knauer, former presidential special assistant on consumer affairs; and C. S. Tsowas, General Electric Corporation's consultant for insurance plans and corporate employee relations representing the U. S. Chamber of Commerce.

House Attacks HEW Health Guidelines

The House has unanimously asked the Carter administration to set aside or relax many of its controversial health planning guidelines.

Published in the *Federal Register* in September the guidelines are part of a campaign to check health cost inflation. The Congressional turndown of the HEW proposals was another painful example of the administration's poor batting average on the Hill.

Congress rejected the guidelines by a 357 to 0 vote on a resolution introduced by Rep. Berkley Bedell (D-Iowa).

Objections to the proposed guidelines that swarmed into the Congress and HEW fell into three major areas: (1) The proposed guidelines, as currently drafted, might force small rural or community hospitals to close; (2) The standard applicable to obstetrical units may be too strict; (3) The guidelines will tend to take decision-making out of local hands.

HEW officials have promised to ease the proposed guidelines in a final version due early in 1978.

announcements

CALENDAR OF MEETINGS

NATIONAL

1978

- Feb. 22-23 American Orthopaedic Society, Dallas
- Feb. 22-26 American Association of Genito-Urinary Surgeons, Ocean Reef Club, Key Largo, Florida
- Feb. 22-26 American College of Nuclear Physicians, San Francisco

- Feb. 23-28 American Academy of Orthopaedic Surgeons, Convention Center, Dallas
- Mar. 2-4 Diseases of Large Bowel, Fontainebleau Hotel, Miami Beach
- Mar. 6-9 American College of Cardiology, Disneyland, Anaheim, California
- Mar. 6-10 International Academy of Pathology (US-Canadian Division), Hilton Hotel, Atlanta
- Mar. 10-15 American Society of Abdominal Surgeons, Caesar's Palace, Las Vegas
- Mar. 13-16 American College of Surgeons, Cincinnati
- Mar. 29-31 American Society for Clinical Pharmacology and Therapeutics, Peachtree Plaza Hotel, Atlanta
- Mar. 29-April 2 American Society for Dermatologic Surgery, Vacation Village, San Diego
- April 2-4 National Conference on High Blood Pressure Control, Hilton Hotel, Los Angeles
- April 2-8 North American Clinical Dermatologic Society, Breakers Hotel, Palm Beach, Florida
- April 5-8 Conference on Rural Health, Regency Hotel, Denver
- April 9-14 American College of Radiology, California Town and Country, San Diego
- April 10-13 American College of Obstetricians and Gynecologists, Disneyland Hotel, Anaheim, California
- April 17-20 American College of Physicians, Sheraton-Boston, Boston.
- April 17-20 Southwestern Surgical Congress, Riviera Hotel, Palm Springs, California
- April 23-27 American Association of Neurological Surgeons, Fairmont Hotel, New Orleans
- April 24-25 American Broncho-Esophagological Association, Breakers Hotel, Palm Beach, Florida
- April 24-29 American Academy of Neurology, Bonaventure Hotel, Los Angeles
- April 28-29 American College of Clinical Pharmacology, Sheraton-Palace, San Francisco
- April 30-May 3 American Association of Plastic Surgeons, St. Francis Hotel, San Francisco

STATE

- April 12-15 Tennessee Medical Association, Hyatt Regency, Knoxville

The continuing medical education accreditation program of the TMA has full approval by the Liaison Committee on Continuing Medical Education. An accredited institution or organization may designate for Category 1 credit toward the AMA Physician's Recognition Award those CME activities that meet appropriate guidelines. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Ave., Nashville, TN 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

IN TENNESSEE

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman, can plan an individualized program of one to four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, ward rounds, learning individual procedures, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

Participating Departments and Divisions

Allergy & Immunology	Samuel Marney, M.D.
Anesthesiology	Bradley E. Smith, M.D.
Cardiology	Gottlieb C. Friesinger, III, M.D.
Chest Diseases	James D. Snell, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Dermatology	Lloyd King, M.D.
Diabetes	Oscar B. Crofford, M.D.
Endocrinology	David Rabin, M.D. David N. Orth, M.D.
Gastroenterology	Steven Schenker, M.D.
General Internal Medicine	W. Anderson Spickard, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.
Medicine	Grant W. Liddle, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Oncology	Robert Oldham, M.D.
Orthopedics	Paul W. Griffin, M.D.

Pathology	William H. Hartmann, M.D.
Pediatrics	David T. Karzon, M.D.
Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Everette James, Jr., Sc.M., J.D., M.D.
Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sargent, M.D.
Surgery	
Cancer Chemotherapy	Vernon H. Reynolds, M.D.
General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neill, M.D.
Plastic	John B. Lynch, M.D.
Renal Transplantation	Robert E. Richie, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.

Eligibility: All licensed physicians are eligible.

Administrative Fee: \$200.00 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1) and American Academy of Family Physician's Continuing Education accreditation.

Application: For further information and application, contact: Paul E. Slaton, M.D., Director, Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

Continuing Education Schedule 1978

March 5-10	Radiology Update 1978 (23 hours)
March 17-18	Annual Meeting, Southern Society of Physical Medicine and Rehabilitation
March 22-24	Clinical Endocrinology: Update 1978 (20 hours)
March 27	7th Annual James C. Overall Visiting Lectureship—Pediatric Pulmonary
April 19-21	Legal Aspects of Radiology (co-sponsored by School of Law)
April 21	Annual Barney Brooks Lectureship in Surgery (1 hour)
April 22	Annual Scott Surgical Society Lectureship
April 27	Annual Frank E. Luton Lecture in Psychiatry (1 hour)
April 28-29	Symposium on Clinical Gynecology
Spring, 1978	Update in Management of Urologic Malignancies—Annual Cancer Symposium (12 hours)
May 18-19	17th Annual Seminar in Psychiatry (for nonpsychiatrists)
May, 1978	Postgraduate Course in Allergy
May, 1978	Scientific Sessions of the Vanderbilt Medical Alumni Reunion (6 hours)

July 6-9 Contemporary Clinical Neurology,
Hilton Head, S.C. (16 hours)

For information contact: Vanderbilt Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

MEHARRY MEDICAL COLLEGE SCHOOL OF MEDICINE

Extended Continuing Education Program

Arrangements have been made with the following services and departments in the medical school to allow practicing physicians to participate in that service's activities for a period of one to four weeks. This program provides an opportunity for physicians to study in depth for a specified period. The schedule of activities is individualized in response to the physician's request by the participating department. The experience includes conferences, ward rounds, audiovisual materials and contact with patients, residents and faculty.

Participating Departments

Anesthesiology	Ramon S. Harris, M.D.
Family Practice	John Arradondo, M.D.
Internal Medicine	
Cardiology	John Thomas, M.D. Kermit R. Brown, M.D. Qamar A. Kahn, M.D.
Chest Disease	Joseph M. Stinson, M.D. Paul A. Talley, M.D. Edward A. Mays, M.D.
Dermatology	Thomas W. Johnson, M.D. David Horowitz, M.D.
Gastroenterology	Ludwald O. P. Perry, M.D. Buntwal M. Somayaji, M.D.
General Medicine	Edward A. Mays, M.D.
Hematology/Oncology	Robert S. Rhodes, M.D. Robert S. Hardy, M.D.
Neurology	Calvin L. Calhoun, Sr., M.D. Gregory Samaras, M.D.
Obstetrics & Gynecology	Henry W. Foster, M.D.
Gynecological Endocrinology	Elwyn M. Grimes, M.D.
Ophthalmology	Axel C. Hansen, M.D.
Orthopedics	Wallace T. Dooley, M.D.
Pathology	Louis D. Green, M.D. John C. Ashhurst, M.D.
Pediatrics	E. Perry Crump, M.D.
Surgery	
General	Louis J. Bernard, M.D.
Neurological	Charles E. Brown, M.D.
Thoracic and Cardiovascular	David B. Todd, M.D. Ira D. Thompson, M.D.
Urology	Marcelle R. Hamberg, M.D.

Fee: \$100 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1), American Academy of Family Physicians Continuing Education Accreditation and Continuing Education Units by Meharry Medical College.

Application: For further information contact Frank A. Perry, M.D., Director, Continuing Education, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

Continuing Education Schedule

April 20-22 Matthew Walker Surgical Symposium
(20 hours)

May 24-26 Internal Medicine—1978 (24 hours)
October Cleve Ewell Hematology Seminar (6 hours)

For information contact Frank A. Perry, M.D., Director of CME, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

UNIVERSITY OF TENNESSEE CLINICAL EDUCATION CENTER

Chattanooga

Continuing Education Schedule 1978

Mar. 2-3 Clinical Orthopedics—Chattanooga
Mar. 20-23 Diagnostic Radiology for Emergency & Family Physicians—Lake Tahoe, NV
Mar. 21 Respiratory Infections—McMinn-Monroe County Medical Society
Apr. 14-15 Pediatric Course—Chattanooga
Apr. 18 Postsurgical Infections—McMinn-Monroe County Medical Society
May 4-6 Basic Cardiology—EKGs & Therapy for the Primary Care Physician—Chattanooga
May 16 Helminthic & Parasitic Infections Requiring Intermediate Hosts—McMinn-Monroe County Medical Society
June 14-20 OB/GYN Course—Humacao, Puerto Rico

For information contact: LeRoy J. Pickles, Director, Continuing Medical Education, Suite 400, 921 E. 3rd St., Chattanooga, TN 37403, Tel. (615) 756-3370.

UNIVERSITY OF TENNESSEE CENTER FOR THE HEALTH SCIENCES Memphis Unit

March 13-15 The Infertile Female: Practical Aspects of Diagnosis and Management—Holiday Inn-Rivermont, Memphis. *Credit:* 20 hours AAFP elective and 25 cognates ACOG. *Fee:* practicing physicians, \$175; physicians in training, \$100.

For information contact: Division of Continuing Education, TCHS, 800 Madison Ave., Memphis, TN 38163, Tel. (901) 528-5547.

EAST TENNESSEE CHILDREN'S HOSPITAL

April 18-19 A Day and One Half of Practical Pediatrics

May 2-3 Pediatric Infectious Diseases

For information contact: Karen Lee Shields, Committee on Continuing Medical Education, East Tennessee Children's Hospital, 2018 Clinch Ave., Knoxville, TN 37916.

IN SURROUNDING STATES

UNIVERSITY OF KENTUCKY

Mini-Residencies for Medical and Surgical Practitioners in Office Management Of Emotional Problems

The objective of this course is to give physicians an ideal emotional counseling technique that fits busy office practices. The technique uses a concept of emotions that is consistent with human anatomy and psycho-physiology. Yet, the technique requires no more physician time or patient cost than routine evaluations of new patients. Finally, the technique is readily understandable and easy for practitioners to apply.

One, two and three week courses. Minimum of 40 hours per week. *Tuition Fee:* \$350 per week for the 1st & 2nd week of training; \$500 for 3rd week of supervised practice with patients in the Intensive RBT Treatment Program.

For further information contact: Maxie C. Maulsby, Jr., M.D., Office of Continuing Medical Education, Dept. of RBT, University of Kentucky, Lexington, KY 40506.

Continuing Education Schedule 1978

- April 14-15 Diabetes Control: Why and How—Hyatt Regency Lexington, Lexington, Ky. *Credit:* 9 hours AMA Category 1. *Fee:* \$75.
- April 18-25 Controversies in Care (Obstetrics & Gynecology)—Location: Maui, Hawaii (leaving from Cincinnati, Ohio). *Credit:* 30 hours AMA Category 1. *Fee:* \$850.
- May 4-5 Medical and Behavioral Problems in Older Persons—Hyatt Regency Lexington, Lexington, Ky. *Credit:* 12 hours AMA Category 1. *Fee:* \$80.
- May 17-19 Surgical Diseases in Children: Radiologic Evaluation and Operative Correlation—Hyatt Regency Lexington, Lexington, Ky. *Credit:* 15 hours AMA Category 1. *Fee:* physicians, \$180; residents, \$90.

For information contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, KY 40506.

UNIVERSITY OF LOUISVILLE

- Feb. 24-25 4th International Symposium on Psychopharmacology—Health Sciences Center, Louisville.

For information contact Herman C. B. Denber, M.D., Ph.D., P.O. Box 35260, Louisville, KY 40232.

UNIVERSITY OF MISSISSIPPI

- March 9-11 Surgical Forum V—Holiday Inn Downtown, Jackson, Miss.
- March 30-April 1 Gastroenterology Update—Ramada Inn Coliseum, Jackson, Miss. *Credit:* 18 hours AMA Category 1 and AAFP. *Fee:* \$150.

For information contact: Continuing Education, University of Mississippi Medical Center, 2500 N. State St., Jackson, MS 39216.

MEDICAL COLLEGE OF GEORGIA

- Mar. 7 Metabolic Diseases
- Mar. 7-10 Emergency Medicine: The First 90 Minutes—Tamarron Resort, Durango, Colo. *Credit:* 15 hours AMA Category 1; AAFP pending. *Fee:* \$150.
- Apr. 4 Gastroenterology
- May 2 Orthopedics and Pathology

For information contact: Division of Continuing Education, Medical College of Georgia, Augusta, GA 30901.

BOWMAN GRAY SCHOOL OF MEDICINE

Courses in Ultrasound

Two eight-week postgraduate courses in sonic medicine at Bowman Gray School of Medicine will be offered on the following dates: Jan. 9-March 3 and April 3-May 26, 1978. *Credit:* 30 hours per week in AMA Category 1. Two additional two-day real time courses are offered for obstetricians on March 9-10 and June 1-2, 1978. *Credit:* 10 hours per day in AMA Category 1.

For information contact: James F. Martin, M.D., Director, Center for Ultrasound, Bowman Gray School of Medicine, Winston-Salem, NC 27103.

DUKE UNIVERSITY MEDICAL CENTER

6th Annual Radiology Tutorial

- April 3-7 The Radiology of Neoplastic Diseases—Duke University, Durham, N.C. *Credit:* 27 hours AMA Category 1.

For information contact: Robert McLelland, M.D., Radiology—Box 3808, Duke University Medical Center, Durham, NC 27710, Tel. (919) 684-4397.

OF SPECIAL INTEREST

NEW ORLEANS GRADUATE MEDICAL ASSEMBLY

March 31-
April 4 The High Risk Patient—The Fairmont, New Orleans. *Credit:* AMA Category 1, AAFP, ACEP. *Fee:* non-member physicians, \$200; military or registered nurses, \$100; students, residents, interns and Fellows, no charge.

For information contact: New Orleans Graduate Medical Assembly, Room 1538, Tulane Medical Center, 1430 Tulane Ave., New Orleans, LA 70112, Tel. (504) 525-9930.

AMERICAN COLLEGE OF RADIOLOGY

Breast Cancer Conference

March 6-9 17th Annual National Conference on the Detection and Treatment of Breast Cancer—San Francisco. *Credit:* 29 hours AMA Category 1; 18 cognates ACOG plus 2 cognates each workshop.

For information contact: Breast Cancer Conference, ACR, 6900 Wisconsin Ave., Chevy Chase, MD 20015.

AMERICAN INSTITUTE OF ULTRASOUND IN MEDICINE, INC.

April 2-9 4th Annual Spring Educational Meeting—San Juan, Puerto Rico. *Fee:* AIUM and ASUTS members, \$190; nonmembers, \$240; residents, fellows, students, \$150.

For information contact: AIUM/Puerto Rico '78, AIUM Executive Office, 6161 N. May Ave., Suite 260, Oklahoma City, OK 73112, Tel. (405) 840-3723.

WEST VIRGINIA CHAPTER—AAFP

April 7-9 26th Annual Scientific Assembly—Holiday Inn Charleston House, Charleston, W. Va. *Credit:* 17 hours.

For information contact: William B. Ferrell, Jr., Executive Secretary, West Virginia Chapter American Academy of Family Physicians, Route 4-Box 22A, Charleston, WV 25312, Tel. (304) 776-1178.

AMERICAN COLLEGE OF PHYSICIANS

A comprehensive schedule of continuing medical education activities for a 12-month period beginning in August, 1977, includes regional meetings and postgraduate courses to be held at various locations throughout the United States and Canada.

The ACP Regional Meetings, lasting one to four days, are designed for practicing internists and physicians in related fields. They bring new developments in the basic sciences and clinical medicine from major research centers to internists who are unable to travel to medical meetings outside of their state, and also provide a vehicle for local physicians to report to their colleagues on investigative work and clinical experiences in the wide scope of subject areas included in the practice of internal medicine.

The ACP Postgraduate Courses provide the opportunity for in-depth study in fields covered by internal medicine and its subspecialties. Averaging three to five days, they are directed toward practicing physicians and are presented in association with medical schools and other teaching institutions.

For information and registration contact: Registrar, Postgraduate Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

Regional Meetings

*See September 1977 issue for complete
1977-1978 listing*

Postgraduate Courses

*See September 1977 issue for complete
1977-1978 listing*

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|--------------------|---|
| Feb. 27-
Mar. 3 | 4th Stanford-Palo Alto Medical Research Foundation Winter Course in Infectious Diseases at Sun Valley—Sun Valley, Idaho |
| Feb. 28-
Mar. 2 | Clinical Oncology for the General Internist—Denver |
| Mar. 1-3 | Practicle Management of Pulmonary Diseases—Temple, Tex. |
| Mar. 6-8 | Diagnosis, Treatment and Prevention of Genetic Disease—Palm Springs, Cal. |
| Mar. 6-8 | Recent Advances in Neuro-Endocrinology—Montreal |
| Mar. 20-22 | Recent Advances in Internal Medicine—Galveston, Tex. |
| Mar. 20-24 | Current Concepts in Renal Disease and Electrolyte Disorders—New Haven, Conn. |
| Mar. 22-24 | Clinical Endocrinology—Nashville, Tenn. |
| Mar. 23-25 | Clinical Recognition and Management of Heart Disease—Tucson, Ariz. |
| Mar. 29-31 | Diagnostic and Therapeutic Advances in Gastroenterology—Rochester, Minn. |

- Apr. 3-5 Current Concepts in Clinical Oncology
—Albany, N.Y.
- Apr. 5-7 Current Concepts in Clinical Infectious
Diseases—Charlottesville, Va.
- Apr. 12-14 Laboratory Medicine—Rochester,
Minn.
- Apr. 26-28 Applied Immunology: The Rheumatic
Diseases, Birmingham, Ala.
- Apr. 27-29 Three Days of Hepatobiliary Diseases
—Atlanta

March 20-
April 2

—with Clarence Merskey, M.D., Al-
bert Einstein College of Medicine,
Bronx, N.Y.

Dyspnea & Fever: A Pediatric Emer-
gency—with Jonathan Bates, M.D.,
Children's Hospital Medical Center,
Boston.

Reversing Vasectomy: Factors for
Success—with Joseph E. Davis, M.D.,
chairman, Department of Urology,
New York Medical College, N.Y.C.

Osteoporosis: A Disorder of Bone
Remodeling (Pathophysiology-Diag-
nosis and Treatment-Prevention)—
with Robert P. Heaney, M.D., vice-
president for health sciences, Creigh-
ton University, Omaha, Neb. (1 hour
AMA Category 1; AAFP Prescribed
credit)

NETWORK FOR CONTINUING MEDICAL EDUCATION

Schedule for Upcoming Programs

- Feb. 20- Ophthalmology in Clinical Context—
March 5 with John W. Chandler, M.D., Uni-
versity of Washington and Swedish
Hospital Medical Center, Seattle.
- March 6-19 Defibrination Syndrome . . . or Dis-
seminated Intravascular Coagulation?

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See August 1977 issue for listing

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9	10	11	12	13	14	15
			TMA 143RD ANNUAL MEETING Hyatt Regency Hotel - Knoxville			
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	NOTES					

Medicare, Medicaid, and the PSRO

JOSEPH G. BURD, M.D.

Fact: Medicare and Medicaid give a cash bonanza of \$50 billion to government employees, patients, doctors and hospitals.

Fact: The human race encompasses all degrees of integrity.

Fact: Efforts are being made in Washington to have access to all medical records, not just those of Medicare and Medicaid, presumably to find standards.

Fact: Invasion of privacy is apparently dependent upon whose ox is being gored.

Therefore: PSRO administered by doctors voluntarily would do much to cut these and similar attempts off at the pass.

The face of medicine has changed. More changes are coming. Poliomyelitis, osteomyelitis, and tuberculosis can be controlled with medication, so instead of attending crippled children's clinics we have more time for Medicare and Medicaid forms and understanding the Professional Standards Review Organization.

This isn't all bad. Twenty-five years ago, we treated a segment of our population without a fee. Now we fill out forms and collect fees. Every now and then we rebel against the paper explosion associated with Medicare and Medicaid, but a more sane approach is that we get paid for the time and the work. Perhaps we lost something in having our charity practice legislated out from under us, but since this is the age of class action litigation and emphasis on rights rather than responsibilities, we are merely forced into the trend of the times.

The medical community is not going to change this trend. We cannot change it because it is not a trend. We are confronted with a deeply entrenched bureaucracy. If our President loses battles with entrenched bureaucracy blocks, the medical community will not enjoy any greater success in this direction.

The medical community is criticized as a whole because of the abuses in the Medicare and Medicaid programs. By far the great majority of doctors are conscientious, hard workers. Abuses in the welfare programs do exist and it doesn't help to ignore the abuses. It helps even less to deny they exist.

We are asked to clean our house, then we are handcuffed by the loopholes by the civil liberty attorneys. The same legislators who dream up a welfare program establish a bureaucracy or establish a new bureau for the program. The legislators get public acclaim for the new program and also enjoy the votes from the new government employees and promptly forget about supervising the program. The medical community is then damned for permitting the abuses that are built into the welfare program, particularly Medicare and Medicaid. These abuses are on both sides of the fence. Patients are at times encouraged to join the program to increase the size of the involved grant. Doctors are tempted to carry out the unnecessary treatment of patients at the patients' request. Perhaps the medical community could institute litigation on the basis of harm caused by an attractive nuisance in the Medicare and Medicaid programs.

PSRO is nothing more or less than what a good doctor tries to do in his everyday practice. He validates the diagnosis, then works out a program of treatment. The doctor then tries to avoid any unnecessary hospital expense and proceeds with a follow-up type care. The only difference in the PSRO picture is that he would document the steps. The PSRO is flexible for unusual care so documentation, again, is necessary. In other words, the same overall plan is followed under the PSRO picture as is followed for any other type medical care or any other type third party report.

Since, in many instances, government agencies pay one third of our patients' costs, the agency is entitled to know where its money is being spent and how it is being spent. Since we cannot legislate morality, we can help limit abuses by encouraging the PSRO approach. Cooperating with PSRO and utilization of the hard work done by our medical societies and specialty boards could give all concerned a handle on a tool to limit welfare program abuses involving the medical community.



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Medical Events in 1977 — A Review by the American Medical Association

The year 1977 was marked by continuing progress on many fronts in the unending fight against sickness and death.

Dialogues continued in a number of health areas where all the facts are not yet in hand. Does saccharin cause cancer? Do x-rays of the breast for possible cancer cause more harm than good? Will Vitamin C cure the common cold? How valid is megavitamin therapy for a variety of ailments? Is biofeedback the answer to many human ills?

Perhaps the most important medical development of the year 1977 came at the year's end, with government licensing of a new vaccine to prevent pneumococcal pneumonia, which kills about 25,000 Americans each year. Reports of a field trial of the vaccine held in South Africa were published in the *Journal of the American Medical Association* in December.

One of the potentially most important developments actually became known a few weeks before the end of 1976, with publication in *JAMA* of results of a field test in Iran of a new rabies vaccine. The product, developed at the Wistar Institute in Philadelphia, was used to treat 45 people bitten by rabid animals. It requires only six shots—instead of 14 to 21 in the present treatment—and has no side effects. The test was done in Iran because this nation still has a serious problem with rabies among dogs and wolves. None of the victims treated with the new serum developed rabies or had any adverse reactions to the vaccine.

Medical highlights of the year—

Saccharin was still on sale at the end of the year, after Congress agreed on legislation to postpone a ban on its use for at least 18 months. The Food and Drug Administration had banned the artificial sweetener on the basis of animal tests which indicated it might cause cancer.

The fad diet of the year—a liquid protein substance—was declared hazardous to health by the AMA's nutrition unit. The diet is hazardous unless administered under close supervision of a physician. At the year's end several deaths were being investigated as possibly related to the diet.

A dramatic decline in heart disease was noted toward the end of the year. Since 1950 the rate of deaths from heart disease in the United States has dropped 30%. One third of that reduction has occurred in the last five years. Modifications in lifestyle—giving up smoking, keeping weight down, regular exercise—plus control of high blood pressure are credited for the gain.

There was debate among experts as to whether angina from coronary disease should be treated medically, or whether surgery is preferred. A Chicago scientist indicated that the heart operations often aren't really necessary and that drugs and exercise can manage the problem effectively.

The nation's medical leaders, including the AMA and its Auxiliary, launched during the year an all-out drive to immunize the nation's children against communicable diseases. Studies had found that many children were not protected.

Massive vitamin overdoses pose a new danger to the American public, the AMA's nutrition expert warns, in the wake of court decisions and congressional actions that have virtually removed all controls from packaging and sale of vitamins. "The lid is off," the AMA warned. Meantime, a research report in *JAMA* said that Vitamin C had been tested carefully as a treatment for the common cold, and was found wanting.

Laetrile continued to demand considerable attention in both medical and political circles as state legislators sought to make the controversial cancer drug legal despite its ban by the FDA. All leading scientific organizations, including the AMA, declared laetrile is worthless against can-

cer. But sales of the product continued, despite reports of cyanide poisoning from overdose of laetrile.

Guidelines were offered early in the year in *JAMA* for mammography screening. Screening was recommended for those in high-risk categories and all women past 50 years. Mammography was ruled out for women under 50 without symptoms.

Gains were reported during the year against bladder and prostate cancer, but lung cancer increased. The five-year survival rate for most cancer patients has not changed much in 25 years.

Studies of biofeedback continued in medical and health circles. No longer a novelty, biofeedback is now a part of treatment for certain health problems in certain individuals. It is not a cureall and is not a complete therapy, behavioral researchers have found.

A national effort was being made in 1977 to ensure that prisoners in American jails will not suffer the cruel and unusual punishment of inadequate health care. The AMA Jail Program formulated a set of minimum standards for jail health services. Six state medical societies are participating in the program, working with 30 pilot jails in gathering data and establishing pilot programs.

Asthma sufferers were benefiting in the fall from two new drugs that have been available in Europe for many years, but only this year were licensed for use in the United States. The two drugs have proved highly effective in relieving asthma attacks. The drugs are beclomethasone dipropionate and cromolyn sodium.

The AMA published a new edition of its book on blood transfusions, the major change being a strong recommendation that transfusions be of red blood cells only, rather than whole blood, to reduce risk to the patient.

A Houston surgical team reported that they had performed cardiovascular operations on more than 500 Jehovah's Witnesses without using blood transfusions. The procedure worked well and the doctors concluded that patients who refuse blood transfusions for religious reasons can undergo major cardiovascular operations with an acceptably low risk.

Exploding pop bottles were added to the hazards of everyday living in another *JAMA* report this fall. More than 30,000 people are in-

jured each year by pop bottles, the report said. Research was under way at year's end to cope with the problem.

A new and revised edition of the AMA's manual on alcoholism indicates that real progress is being made in mobilizing the nation to deal with alcoholism. There is growing awareness that alcoholism is an illness. Meantime, a Canadian report in the AMA's *Archives of Internal Medicine* found that alcoholism is much more damaging to women than to men.

A new treatment for hyaline membrane disease—a serious disorder in premature newborns—has made possible a substantial decrease in severe breathing problems and death in premature newborns. It involves administration of plasminogen—a substance in human blood—within 60 minutes of birth. Meanwhile, other studies found that amniocentesis properly performed is safe and useful to identify potential defects well before birth.

The search for a treatment for acne, the plague of adolescents, got a boost during 1977 with a report from Sweden that zinc tablets are sometimes effective against the skin problem.

A new four-drug combination treatment for advanced Hodgkin's disease has proved effective against some cases that had previously defied other drug treatments. The new treatment is known as BVDS, for the first letter of the name of each drug used.

A research group in Pennsylvania has gained initial success with an experimental vaccine against gonorrhea. Further tests are under way. Gonorrhea has grown in magnitude until it is a major communicable disease, infecting some 10 million persons a year in the United States.

Debates continued among scientists as to whether food additives cause hyperactivity in children. A report at mid-year from Wisconsin found no evidence to support the theory that first originated in California.

A furor occurred following a report that 53 women apparently had breasts removed needlessly because of misdiagnosis. Later in the year it was determined that almost all of those who had breasts removed actually did have cancer.

Frank Chappel
AMA Information Service

Summary of AMA House Action

The AMA House of Delegates' 1977 Interim Session was held Dec. 4-7 in Chicago. For the first time, AMA's House and winter scientific meeting were held separately; the scientific sessions were held in Miami.

The House acted on 139 resolutions, with the major emphasis on specialty society representation in the AMA House, national health insurance and health planning.

The House approved a plan for implementing direct specialty society representation in the AMA House. To be eligible for one delegate and one alternate, a specialty society must be represented on an AMA section council and have at least 1,000 AMA members; or, if it has less than 1,000 members, it must be represented on a section council and be a specialty for which there is an approved examining board listed in the AMA liaison committee on graduate medical education's directory of accredited residencies. AMA's Council on Long Range Planning and Development said the change won't result in a major shift in the numerical "mix" in the House of Delegates between state society delegates and specialty society delegates; this will increase the size of the House by 6%, and state societies still will comprise at least 80% of the House. Currently, 48 specialty societies are eligible to apply for direct representation. The term will be two years.

After extensive debate, the House reaffirmed support of AMA's comprehensive health insurance legislation, H.R. 1818.

The House voted to vigorously oppose HEW's proposed national guidelines for health planning as "arbitrary and insensitive to local needs" and said local HSAs should establish their own local criteria. The House also suggested that AMA assist any state medical association that is challenging the inclusion of physicians' offices under the certificate-of-need law, P.L. 93-641.

Cost containment: Urged each state medical association to work with the state hospital association to establish a joint committee on voluntary cost containment, in cooperation with a group newly formed by AMA, American Hospital Association and Federation of American Hospitals.

Abortions: Voted to advise Congress and HEW of AMA's policy that Medicaid should reimburse for elective abortion procedures.

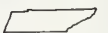
Coinurance: Endorsed the concept of coinsurance or deductibles in health insurance programs. The House stated that partial payment by the patient is a way to reduce the demand for unnecessary services without preventing access to needed care.

Government regulation: Asked AMA to introduce legislation that would impose the same government restraints (e.g., health planning, PSROs) on all nonmilitary "government institutions" that are required of private institutions.

Radiologic technology law: Adopted a Board of Trustees' report that discusses AMA's model state legislation. Endorsing the limited permittee concept for radiologic technologists, the model bill does not endorse licensure or certification of radiologic technologists, but rather offers an additional category of radiologic technologists for states to consider.

Fee information: Suggested that physicians volunteer fee information to their patients. Physicians could initiate discussions about fees, print fee information on office signs or plaques, or routinely distribute fee information booklets to new patients.

Confidentiality: Adopted guidelines to help computer service organizations and physicians maintain the confidentiality of medical record information stored in computerized data bases.



First Lice Census Uncovers Surprising Facts

What is believed to be the first national survey of the human head lice problem in the United States has uncovered two startling findings: female cases outnumber males almost 2:1 and cases among whites outnumber black more than 20:1.

Preliminary findings were released by American Health Consultants, Atlanta, which conducted the study under a special grant from Norcliff Thayer, Inc., manufacturers of the nonprescription leading lice remedy product, A-200 Pyrinate.

An eight-page survey questionnaire went to more than 4,000 directors of nursing services at community health agencies in towns with over 50,000 population across the United States. Approximately 15% of those contacted responded, an unusually high response rate.

Lice, which had disappeared from the public health spotlight, reemerged as a growing public health problem in the mid-1960s and have since reached epidemic proportions. Estimates based on the number of lice remedies sold to the public

annually indicate the number of cases has risen from a low of 250,000 in 1963 to a high of about 5 million last year.

Following are highlights of the study:

Reported female cases outnumbered male almost 2:1! The preponderance of females held true across all areas of the country, in all types of health facilities responding, and in both large and small cities and towns.

The data revealed that 85% of all reported head lice cases are among whites, and of the remaining 15%, only 4% of those are black (7% Hispanic, 4% "others"). This very important finding would put to rest the rumors that have connected blacks or increased school integration with the head lice problem.

Despite the widespread war against lice, only 20.5% of those responding felt that the number of cases seen by them in the last two years was declining. A much larger percentage, 42.7, felt that the number of cases in their area had increased either somewhat or dramatically in the past 12 months.

The study upset the widely held belief that only the poor or dirty get lice. Thirty-eight percent of all men and 44% of all women reported to have head lice were classified as "clean." In addition, men and women in the middle or upper income family groups accounted for 32.8% and 36.8% respectively of all reported head lice cases in the United States in the past year.

Short hair was also seen to be vulnerable. For

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Roy Smith, Ph.D.

Adjunctive Therapy
Dan B. Page, M.Ed.

Administrator
Dennis P. Dobard

example, 27% of the head lice cases among men occurred in those with hair length styles above their ears.

Many have thought that only elementary school children get head lice. However, according to the survey, about one fourth of the cases occurred in children ages 11 to 16, and another 10% involved adults over the age of 17.

While lice can be found anywhere in the country, the Southeast seems to be more prone to attack, while the Northeast is the only area showing a significant decline in number of cases.

Body lice (different from head or pubic lice and the only type capable of being a disease carrier), often said to be rare in this country, were reported to have been seen by a surprising number of public health respondents. This hints that they may be more widespread than previously thought.

Public health personnel indicated they believe adequate nonprescription lice treatments do exist. A-200 Pyrinates scored highest among the non-prescription brands rated, while Kwell was the highest among the prescription products.

The conspiracy of embarrassed silence that often accompanies the discovery of lice in a community is the biggest problem doctors, parents and teachers have to face. Early detection and treatment remains the best first line of defense.

Guidelines Listed for Proper Antibiotic Use

Physicians today are more aware of undesirable effects of antibiotics and are concerned about proper usage of these drugs, says a communication in the Nov. 14 issue of *JAMA*. In 1976 the Joint Commission on Accreditation of Hospitals established requirements for a regular review of usage of antibiotics in all accredited hospitals in the United States, as the first step in controlling improper usage. Some patients have adverse side effects from antibiotics, bacteria can become resistant to antibiotics from frequent use, some infections, notably viruses, do not respond to antibiotics, and the drugs are expensive.

To implement the new program required by the Joint Commission, hospital medical staffs should obtain records on antibiotic use and cost. Next the medical staff may establish criteria for antibiotic usage in hospitalized patients. Then follows a study to determine whether there is improper prescribing in the hospital.

If misuse of antibiotics is found, teaching sessions should be set up, bringing in outside speakers if necessary, on proper prescribing. More vigorous methods would follow, if needed, including requiring doctors to specify in writing why they prescribed an antibiotic for a given situation.

Some collaborative effort involving the medical staff, the infection control program, the hospital pharmacy, and the microbiology laboratory can accomplish the objectives of all parties concerned with the use of antibiotics in hospitalized patients.

AMA Adopts Statement On Parent-Newborn "Bonding"

The AMA has adopted a Statement on Parent and Newborn Interaction urging enhancement and humanizing of the birth experience. "Bonding" is the concept of giving newborn infants to their mothers immediately after birth, allowing the two several moments or more to make skin-to-skin and eye contact. If fathers are present, they too join in the bonding or "attachment" process. Bonding is then further promoted by allowing the mother or both parents extensive time with the newborn child during the days immediately following birth.

The House of Delegates of the AMA adopted the statement on the importance of bonding prepared by the Committee on Maternal and Child Care of the AMA Council on Scientific Affairs and the committee's recommendation that hospital medical staffs review hospital practices covering delivery and, if necessary, develop and formulate new guidelines respecting all aspects of professional support for the birth and nurturing process.

Changes in delivery practices should be instituted in keeping with hospital standards for good medical care. While stating that "Innovative alternative settings for birth in the hospital with adequate professional support should be explored and evaluated," the report noted that "Reevaluation of existing practices must preserve the significant technological

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advances which have resulted in improved obstetrical and newborn care."

Howard G. McQuarrie, M.D., Salt Lake City obstetrician and chairman of the Committee on Maternal and Child Care said, "This action by the AMA will now allow medical staffs in hospitals across the country to address the matter of humanizing the delivering or nurturing event. The House action is a vital step in combating the surge of home deliveries in recent years which some scientific studies indicate lead to fetal risk six times that in hospital deliveries."

While deploring this "unacceptable" risk to the infant born at home, Dr. McQuarrie said some expectant parents feel driven to nonhospital deliveries "in trying to achieve the family-oriented birth experience." With AMA support, he said, "hospitals can now examine their positions and work toward enhancing and sustaining this important nurturing event."

In its formal report and recommendations, completed after four years of research, study and preparation, the Committee on Maternal and Child Care referred to the work of Pierre Constant Budin, the turn-of-the-century French obstetrician and author of the first known text on neonatology (the diagnosis and treatment of disorders of the newborn infant).

A specialist in the care of premature infants, Dr. Budin also invented the human incubator, which he designed with a glass window so parents could watch and help care for their ill babies. In his text, *The Nursling*, published in 1907, Dr. Budin wrote of the devastating effect separation of mothers from their infants at birth had on the mothering process. Noted Dr. Budin, "Mothers separated from their young soon lost all interest in those whom they were unable to nurse or cherish."

According to the committee report, "The major components of very early contact are touching, eye contact between mother and infant and parallel facial positioning (en face). Coincident with the development of that concept, the family-oriented birth process has received increasing acceptance by the providers of perinatal care. A more sophisticated public awareness, with emphasis on smaller families, has intensified the desire of mothers and fathers for greater involvement in all aspects of the birth and nurturing process in their families. Disruptions of the service and/or increased cross-infection have not been reported when hospitals and professional staffs have encouraged early parent-newborn interaction."

Immediate maternal and infant bonding, vital to the relationship of the healthy newborn and mother or both parents, is equally important, Dr. McQuarrie said, in cases where the infant is ill at birth, often needing intensive care in a neonatal unit. If bonding following birth has been permitted, the family is able to accept the death of the child if this occurs despite every medical effort, he said.

"Where bonding is possible—if the mother and father have had time with the child before it is transferred to the intensive care unit, or if they

can come there and be with the infant—they can, if the child dies, accept the death far better than if they never saw or held their baby. If they have not bonded with the child, the death can be a nightmare of unresolved grief."

AMA News Release

Clinical Center Study of Patients With Isolated Aortic Regurgitation

The cooperation of physicians is requested in the referral of patients with isolated aortic regurgitation for studies being conducted by the Cardiology Branch of the National Heart, Lung and Blood Institute at the Clinical Center, National Institutes of Health, Bethesda, Md.

We are seeking patients, 18 years of age or older, who are either symptomatic or asymptomatic. Patients will undergo a complete cardiovascular evaluation including catheterization to quantitate the degree of regurgitation and to assess left ventricular function. The major goal of this study is to identify reliable markers to indicate when valve replacement should occur.

A complete summary of the work-up findings and our recommendations will be sent to the referring physician.

Interested physicians may write or telephone: Douglas R. Rosing, M.D., Cardiology Branch, National Heart, Lung and Blood Institute, Clinical Center, Room 7B15, NIH, Bethesda, MD 20014; Tel. (301) 496-5817.

AMA Issues Revised First Aid Book

General recommendations of the American Medical Association for first aid are included in the newly revised edition of the AMA's First Aid Guide.

Detailed instructions are given for mouth-to-mouth breathing to restore respiration in accident or illness. Cardiopulmonary resuscitation for heart attack victims is explained briefly, with the caution that CPR should be done only by qualified persons.

Directions for control of heavy bleeding and how to cope with shock are included. New in the 1977 edition is a page on how to handle contact lenses in the eyes of an injured person. Don't pry them out. If they won't wash out, leave them for an expert to remove.

Emergency burn treatments include the reminder that minor burns should be plunged into cold water or ice to relieve pain. Wash out cuts and abrasions with soap and warm water, and do not use an antiseptic on the wound. In the section on "Unscheduled Childbirth," the AMA points out that "Childbirth is natural and normal. Let nature take its course. Do nothing more than support emerging baby." Then follows instructions on how to tie off and cut the umbilical cord.

The Guide concludes with a list of 27 first aid supplies recommended to be kept on hand at home and carried on family outings. These include various size bandages and sterile dressings, safety pins, soap, table salt (for heat exhaustion), paper drinking cups, a flashlight, scissors, tweezers, splints, tongue depressors, tourniquet, syrup of ipecac and activated charcoal, rubbing alcohol, chemical cold and heat packs, containers of water, blanket, nail clipper, old towels and sheets for additional bandages, and such personal items as recommended by the family doctor for each individual.

Also newly revised this winter is the AMA's poison chart, giving first aid for poisonings, bites, eye injuries caused by chemicals and skin injuries. It is designed to be fastened to the inside of the door of the bathroom medicine cabinet. The chart should be used in conjunction with the First Aid Guide.

New American Vaccine Tested in South Africa

Further details of field trials among South African gold miners of a new American pneumonia vaccine are reported in the Dec. 12 issue of *JAMA*.

The vaccine was approved by the Food and Drug

Administration last month for use in the United States. It prevents one common form of pneumonia that kills about 25,000 Americans each year. The vaccine is recommended for all persons 50 or older; anyone with a chronic illness; anyone living in a nursing home or other chronic care facility where pneumonia could spread easily; and anyone recovering from a serious illness. It is called Pneumovax, and will be available after Feb. 1.

Pneumonia is the fifth most frequent cause of death in the United States and is a leading cause of illness and death all over the world. If treatment with antibiotics begins promptly, pneumonia most often can be cured. But if treatment is delayed a few days, serious damage to the body already has been done.

South Africa was selected for field trials of the American-made vaccine because pneumonia occurs with high frequency among novice gold miners.

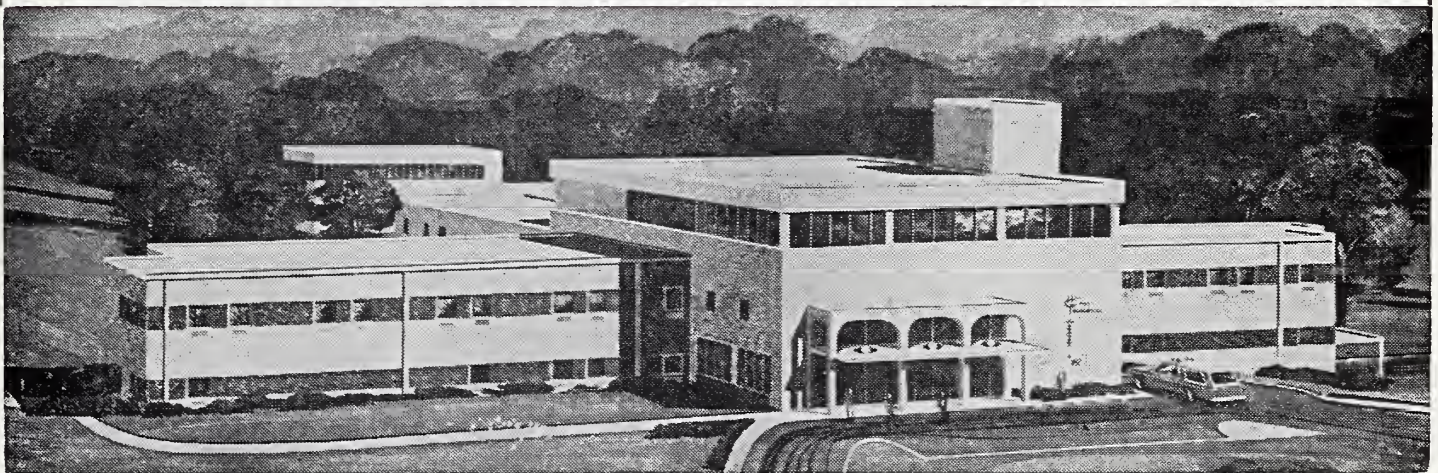
The studies were carried out in young adult novice miners who originated mainly from Malawi and the eastern coastal region of southern Africa. They worked at a mine in the Transvaal. Groups of miners were vaccinated, and their sickness record was compared to control groups of unvaccinated workmen. Follow-up was made among the miners who reported to the dispensary for medical attention.

Informed consent was obtained from each person

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entered into the study. Two vaccines were used—one protecting against six different strains of pneumonia; the other protecting against 12 strains. The six-valent vaccine afforded 76% reduction in cases of laboratory-verified pneumococcal pneumonia. There was a 92% reduction in the cases afforded by the 12-valent vaccine.

The vaccines were well tolerated and offer great promise for effective control of illnesses caused by pneumococci. The vaccine licensed in the United States protects against 14 different strains of pneumonia.

Home Humidifiers Dangerous If Not Given Proper Care

The home humidifier is a useful device to put moisture back into air that has been dried out by heating on cold winter days. But the home humidifier demands proper care and attention. If not properly maintained, it can cause severe respiratory illness.

A report in the Dec. 19 issue of *JAMA* alerts physicians to the fact that water in home humidifiers contaminated by plant and air-borne organisms is sometimes responsible for a respiratory problem known as allergic alveolitis, or hypersensitivity pneumonia.

The condition includes shortness of breath that is sometimes so severe that the sufferer is unable to do routine housework or office work. Extensive tests traced the cause to offending organisms in the humidifiers. The patients improved markedly when the home humidifiers were discontinued. The offending organisms are brought into the home on plants, and sometimes in the air. They settle into the humidifiers and grow rapidly.

The situation can be prevented by keeping the humidifiers clean and by adding a growth deterring chemical such as copper sulfate to the water. Portable units should be cleaned thoroughly once a week with detergent, then refilled with fresh water containing growth deterrent. For the humidifier units that are built into furnaces, the screens should be changed frequently and growth deterrent applied.

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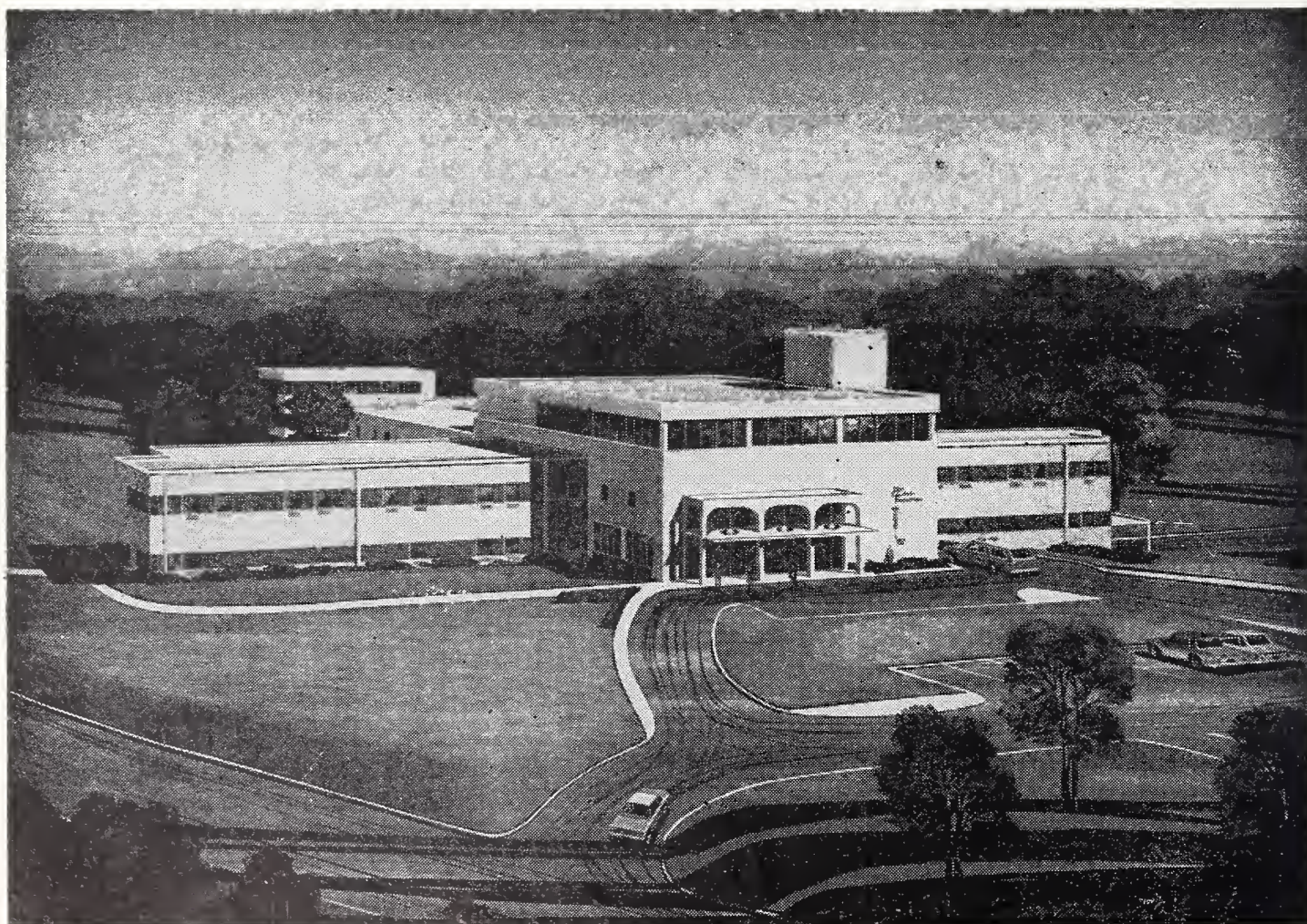
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Pheresis Techniques in Therapeutic Procedures & Preparation of Blood Products

ADELISA L. PANLILIO, M.D.; CHARLES H. WALLAS, M.D.; and DAVID E. JENKINS, JR., M.D.

Introduction

The term pheresis is derived from a Greek root "aphairesis" meaning removal. When used in combination with the prefix leuka-, platelet-, or plasma-, it refers to the procedure of removal of white cells, platelets, or plasma. With aggressive cancer chemotherapy producing marrow hypoplasia and aplasia more frequently, the provision of cell support in the form of platelet and granulocyte concentrates obtained by pheresis has become an important responsibility of hospital blood banks and regional blood centers.

Since platelet transfusions were introduced in the 1960s, deaths of patients with acute leukemia due to hemorrhage or with hemorrhage as a contributing cause have dropped from 65% to 23%.¹ Many platelet transfusions are given in the form of random units of platelet concentrate. Increasingly, however, the provision of platelets to patients requiring long-term support is by plateletpheresis of single donors. As deaths in patients with acute leukemia due to hemorrhage have declined, the relative number of deaths due to infection have increased despite the use of broad-spectrum antibiotic therapy. Clinical experience with the use of granulocyte concentrates in neutropenic patients has been encouraging and their transfusion, where available, is gaining acceptance in the medical community.

The collection of single-donor platelet concentrates and granulocyte concentrates has be-

come practical with the development of cell separators. In addition, these machines have been used to collect plasma; to perform therapeutic procedures—plasmaphereses, plateletphereses, leukaphereses and red cell exchanges; and to collect various components for research purposes. In this communication, a brief overview of the state of the art of pheresis and a description of the Murl C. Whitson Pheresis Program of the Nashville Regional Red Cross Blood Program will be presented.

Methods

Cell separators were developed to enable the processing of large volumes of blood from a single donor in a relatively short period of time. The first type of blood processor to become available was the continuous flow centrifuge, exemplified by the Aminco Celltrifuge. The principle of its operation is the differential centrifugation of anticoagulated whole blood into its components. The desired component or components is collected and the rest of the blood is returned to the donor. Flow of blood from the donor through the machine and back into the donor is continuous. Among the advantages of this type system are the requirement of smaller amounts of extracorporeal blood and the ability to process larger volumes of blood in a given time period than with a discontinuous flow system. Disadvantages include higher equipment cost and the use of a reusable centrifuge bowl (making hepatitis transmission between donors a theoretical possibility).

The sole example of a discontinuous flow centrifuge type cell separator is the Haemonetics

From the Nashville Regional Red Cross Blood Program and the Departments of Pathology and Medicine, Vanderbilt University School of Medicine, Nashville.

The opinions and assertions are those of the authors and do not necessarily bear relationship to the policies or views of the American Red Cross.

BLOOD PHERESIS/Panlilio

Model 30 Blood Processor, which also operates on the principle of differential centrifugation, but which differs from a continuous flow centrifuge in that it processes blood in aliquots rather than continuously. A larger extracorporeal volume of blood is required to collect a product, and smaller volumes of blood overall can be processed than with continuous flow separators. The initial cost of the Model 30 is slightly less than that of a continuous flow centrifuge, though the cost of disposables is about the same. Both the harness and bowl for the Model 30 are disposable.

Both continuous and discontinuous flow centrifuges can be used to collect plasma, platelets, or granulocytes, depending on the collection procedure and anticoagulant used. Generally, donors on continuous flow centrifuges are heparinized while those on discontinuous flow centrifuges do not receive systemic anticoagulation, but blood is instead anticoagulated with a citrate solution as it is drawn from the donor. For platelet collections, the anticoagulant can be ACD (NIH formula A), ACD-B, or some other citrate solution. For granulocyte collections, the anticoagulant used contains citrate and usually a rouleaux-inducing agent such as hydroxyethyl starch as well. By increasing the sedimentation rate of red cells, separation of granulocytes from red cells is improved, and yields are better than if no such agent were employed. Corticosteroid administration to the donor has also been shown to improve granulocyte yields.

There is only one other type blood processor available at the present time, a filtration leukapheresis apparatus (Fenwal Leukopheresis Pump and Leukopak Filters) for the collection of granulocytes. The principle used in collection by filtration is the reversible adhesion of granulocytes to nylon-wool filters. At a relatively high pH (7.4-7.5 at 4 C for heparinized blood) granulocytes adhere to nylon-wool filters. Perfusing the filters with citrated saline, which has a lower pH, elutes the granulocytes. Generally, larger numbers of granulocytes can be harvested by this method than by centrifugation methods. Clinical experience with the use of filtered and centrifuged granulocytes has shown similar effectiveness, although the incidence of febrile transfusion reactions is higher with filtered granulocytes, and there is also some evidence suggesting impaired function of filtered granulocytes.

Donations by pheresis take approximately one

and one half hours for plateletpheresis and as long as two to two and one half hours for leukapheresis. Donor reactions are generally the same as those observed in whole-blood donations, including vasovagal reactions, faintness, nausea and vomiting. Side effects peculiar to pheresis include circumoral paresthesias with the use of citrate anticoagulant, thought to be due to a decrease in ionized calcium; fever and chills, especially with filtration leukapheresis; and bleeding problems when heparinization is used.

Results

Since February 1975, pheresis procedures have been performed in Nashville at the Murl C. Whitson Pheresis Center of the Nashville Regional Red Cross Blood Program. This center was established with monies made available to the Division of Hematology at Vanderbilt University School of Medicine in memory of Mrs. Whitson, who had had leukemia. Currently, it is staffed by four R.N.s and an assistant, with one of the medical staff at the Red Cross directing the activities of the pheresis program. Procedures are routinely scheduled from Monday through Friday from 8 AM to 4 PM, although procedures can be scheduled on an emergency basis at other times.

Initially, granulocytes only were collected by the filtration method. Plateletpheresis was started with the acquisition of the Haemonetics Model 30, and since October 1976, granulocytes have been collected solely by centrifugation. Presently two Haemonetics Model 30 Blood Processors are used in the performance of pheresis procedures. The activities of the Pheresis Center in a 12-month period from January through December, 1977, are summarized in Table 1. Of the 823

TABLE 1
ACTIVITIES OF THE MURL C. WHITSON
PHERESIS CENTER
NASHVILLE REGIONAL RED CROSS BLOOD PROGRAM
JANUARY—DECEMBER, 1977*

	12-month total	Mean # procedures/ month	Mean # procedures/ week
Plateletpheresis	252	21.0	4.8
Platelet-leukapheresis	297	24.8	5.7
Leukapheresis	214	17.8	4.1
Plasmapheresis	26	2.1	0.5
Therapeutic pheresis	34	2.8	0.7
TOTAL	823	69.5	15.8

*Approximately 110 patients served. Approximately 250 donors pheresed.

procedures performed, 252 (31%) were for platelet collection alone, 297 (36%) for platelets and granulocytes, and 214 (26%) for granulocytes alone. (It should be noted that granulocyte concentrates prepared by centrifugation are rich in platelets as well.) Several plasmaphereses for a patient with hypogammaglobulinemia and therapeutic procedures were also performed in the same time period. Pheresis activity varies a great deal. The most procedures performed in a one-month period in 1977 was 127 and the least was 29.

Approximately 110 patients received pheresis products over a one-year period. The majority of these patients are hospitalized or followed at Vanderbilt University Medical Center or at the Nashville Veterans' Administration Hospital, reflecting the pattern of referral of patients requiring pheresis products. These patients come from the entire region served by the Nashville Regional Red Cross which is Middle Tennessee and Western Kentucky. Only occasionally are products requested for patients hospitalized outside Nashville. Although most of these patients had acute leukemia, a growing number of patients with solid tumors are being served.

Quality control data for the pheresis products collected during January 1978 are summarized in Table 2. It can be seen that platelet concentrates have much less red-cell contamination than do granulocyte concentrates, which can be prepared almost red-cell free. Granulocytes on the other hand are virtually impossible to prepare free of red cells without losing large numbers of granulocytes as well. The granulocyte concentrates, it should be noted, contain essentially

as many platelets as platelet concentrates alone, as the two have similar densities. They are, therefore, especially useful in patients who are both granulocytopenic and thrombocytopenic.

Yields of platelets and granulocytes collected at the Whitson Pheresis Center have been comparable to those reported in the literature. They are dependent on the method of collection as well as on the donor's platelet or white count. Yields of platelets have generally ranged from 3.0 to 6.0×10^{11} , equivalent in number to six to ten units of random platelet concentrate, although pheresis platelets and random platelets may differ markedly in their efficacy—i.e., in their ability to raise platelet counts and bring about cessation of bleeding in selected patients. Dipping into the red cell layer during the procedure increases the yield of platelets. Such products have hematocrits ranging from 2% to 6%. A secondary spin can be used after collection to remove most of the red cells at the loss of approximately 20% of the platelets. Yields of granulocytes prepared by pheresis have generally ranged from 0.4 to 4.0×10^{10} . Granulocytes cannot be prepared free of red cells.

Therapeutic procedures using the Haemonetics Model 30 have been performed since the inception of the program. They have included red-cell exchange in paroxysmal nocturnal hemoglobinuria,² plasmapheresis of various conditions, leukapheresis in blast crisis of chronic granulocytic leukemia, and plateletpheresis in patients with thrombocytosis. With increasing awareness of the therapeutic applications for pheresis, this is expected to be a large area of growth for the program. A summary of therapeutic procedures

TABLE 2
QUALITY CONTROL OF PHERESIS PRODUCTS
MEAN VALUES*
JANUARY 1978

Procedure	Plateletpheresis	Platelet-Leukapheresis	Leukapheresis
Total number performed	17	16	22
Volume of product in ml	164 (70-242)	403 (245-545)	317 (166-420)
Hematocrit	2.8 (0-6.0)	3.9 (1.0-6.0)	5.5 (2.5-12.5)
RBC volume in ml	4.8 (0-9.0)	15.2 (5.5-26.0)	18.3 (5.0-58.4)
Platelet content $\times 10^{11}$	3.3 (0.8-7.3)	5.0 (1.5-12.1)	3.6 (1.7-6.6)
WBC content $\times 10^9$	3.4 (0.1-5.2)	10.2 (6.3-17.0)	9.0 (4.0-15.4)
Neutrophil content $\times 10^9$	0.1 (0-0.5)	5.9 (1.2-10.8)	5.4 (1.4-11.0)
Lymph content $\times 10^9$	2.8 (0.1-4.8)	3.4 (1.1-6.2)	2.8 (0.6-6.5)
Other WBC's $\times 10^9$	0.5 (0-1.7)	0.9 (0.3-1.4)	0.8 (0.1-1.9)

*Numbers in parenthesis represent range of values obtained.

performed in 1977 is presented in Table 3. With only a few exceptions, these procedures were performed on hospitalized patients with equipment and personnel transported to the patient's bedside.

Discussion

The activities of the pheresis program of a regional blood center include a variety of procedures such as collection of platelet and granulocyte concentrates, collection of plasma, and the performance of therapeutic procedures. The center is now an integral part of the Nashville Regional Red Cross Blood Program and its commitment to patient service is borne out in the availability of the staff virtually 24 hours a day.

The majority of pheresis donors in the Whitson pheresis program are members of the family or friends of the patients. They must meet Red Cross requirements for whole-blood donation, although exceptions can be made if platelets or granulocytes are needed from a particular donor who does not meet a given requirement (for instance, age) but would otherwise be acceptable. As fewer red cells are taken than in a whole-blood donation and because platelet and granulocyte counts rapidly return to pre-donation levels, pheresis donations can be made more frequently than every eight weeks.

While ABO + Rh-identical donors are preferable for plateletpheresis collections, it is not absolutely essential, as the product can be pre-

pared almost red-cell free, and ABO-incompatible plasma can be removed by centrifugation. Cross-matching problems can arise if large amounts of ABO-incompatible plasma are given—either to a pediatric patient or to an adult receiving frequent platelet transfusions. Such patients may develop positive direct antiglobulin reactions, creating difficulties in compatibility testing. As leukapheresis products cannot be prepared free of red cells, it is imperative that donor and recipient be ABO compatible. Because of difficulty in always finding Rh-negative donors for Rh-negative recipients, Rh-positive donors have been used. In some instances, RhoGAM has been given to patients to cover the amount of transfused red cells.

Refractoriness to platelet transfusions is, in the majority of cases, due to the development of human leukocyte antigen (HLA) antibodies rather than platelet-specific antibodies. Once refractoriness occurs, HLA matching of donor and recipient is necessary in order to transfuse platelets effectively. One remarkable case managed in Nashville is that of a young man with aplastic anemia who received platelets from his HLA-identical brother for seven years. Despite frequent transfusions over this time period, the patient remained responsive to his brother's platelets with good increments observed after each transfusion. By contrast, the patient became totally refractory to random platelets after only a few months of his illness, and had attenuated responses to HLA-compatible donations from non-siblings.

HLA matching of donor and recipient for

TABLE 3
THERAPEUTIC PHERESIS PROCEDURES PERFORMED IN 1977
MURL C. WHITSON PHERESIS CENTER
NASHVILLE REGIONAL RED CROSS BLOOD PROGRAM

Therapeutic Procedure	Clinical Indication	Number Performed*
Red Cell Exchange	pregnancy in hemoglobin S-C disease	1
Red Cell Exchange	psychosis in sickle cell anemia	1
Plasmapheresis	thrombocytopenia in idiopathic thrombocytopenic purpura	1
Plasmapheresis	hyperviscosity in Waldenstrom's macroglobulinemia	4
Plasmapheresis	suspected Goodpasture's syndrome	7 (2)
Plasmapheresis	thrombotic thrombocytopenic purpura	7 (2)
Plasmapheresis	cryoglobulinemia	8
Leukapheresis	leukocytosis in myeloid hyperplasia	1
Leukapheresis	leukocytosis in acute myelogenous leukemia	3 (2)
Leukapheresis	leukocytosis in acute monocytic leukemia	1

*Each procedure was performed in one patient unless noted in parenthesis.

platelet transfusions is not yet being done routinely, although facilities for tissue typing are available if such testing is indicated. There is not yet a large enough HLA-typed-donor pool to meet the potential needs of the patient population served. A reasonable goal, based on the work of Duquesnoy et al,³ would be 1,000 typed donors. Although the chances of finding an HLA-identical match among random donors is 1 out of 5,000, selective mismatching for cross-reactive antigens has been shown to give results similar to identical matching. This makes it possible for a smaller donor pool to meet the needs of a given patient population.

There is still some controversy as to whether to use single-donor platelets from the start of chronic platelet support or to use them only when refractoriness is noted. If only a few donors are used for a given patient, single-donor platelets would limit the number of HLA antigens to which the donor is exposed. Also, removing red cells from the platelet concentrates removes a majority of lymphocytes, which appear to be more antigenic than platelets. Another advantage of single-donor platelets is the decreased hepatitis risk. To further limit HLA antigen exposure, washed frozen red cells which are poor in white cells can be used since white-cell contamination of whole blood and packed cells is felt to be sufficient to stimulate HLA antibody formation.

Granulocytes collected by centrifugation and filtration can be a useful adjunct to the management of infected neutropenic patients. The role of HLA antigens and granulocyte-specific antigens in responsiveness to granulocyte transfusions is not as clear as with platelets. Should their role be clarified, it may become even more important to have a pool of HLA-type donors available to support pheresis programs such as ours. Reviews of granulocyte transfusion therapy by Graw and Appelbaum⁴ and by Thrash et al⁵ have appeared recently.

Because cell separators can process large volumes of blood faster and more efficiently than can be processed manually, it is possible to use them in the performance of therapeutic procedures for removal of abnormal blood components. There have been numerous reports in the literature of their use in various conditions. Procedures in Nashville have been performed on this basis. In some instances, these procedures are the sole mode of therapy available and in others they are an adjunct to more conventional forms of therapy.

The efficacy of red-cell exchange or of a plasma exchange can be determined using the following formula:

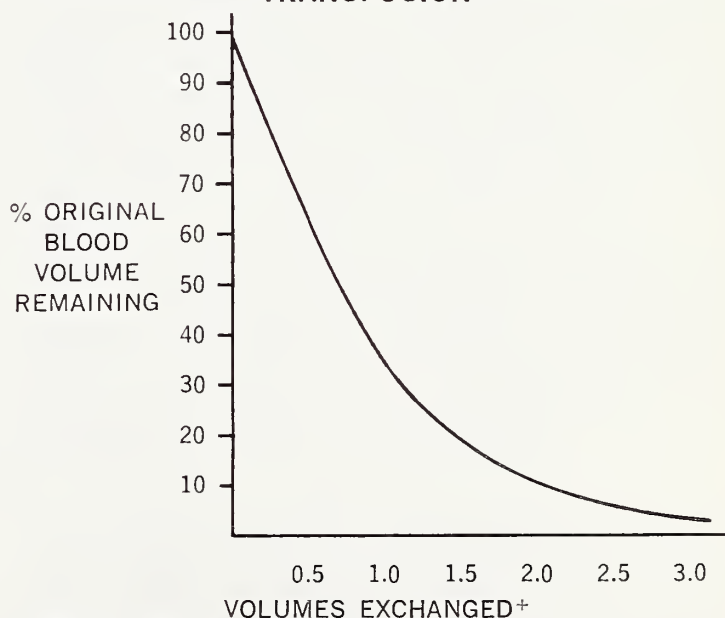
$$R = \left(\frac{V-S}{V} \right)^n \quad \text{where} \quad \begin{array}{l} R = \% \text{ of plasma remaining} \\ V = \text{plasma volume in ml} \\ S = \text{size of aliquots in ml} \\ n = \text{number of aliquots} \end{array}$$

This can be represented graphically as well (Fig. 1). When performing an exchange procedure, attempts are made to accomplish at least a one-volume exchange since this removes 60% of the intravascular distribution of the abnormal component (i.e., red cells, white cells, platelets or plasma).

Prospectus

Pheresis programs are presently based in regional blood centers or in medical centers dealing with large numbers of patients with leukemia and other neoplastic diseases. They share a need for the special donor who can spend the time making this form of donation. Sufficient donors are needed so that reliance is not placed on just a willing few. The education and recruitment of donors therefore needs to be an important activity of those involved with pheresis. HLA typing and matching of donor and recipient are also special needs of pheresis programs. With a large enough donor pool, access to electronic data processing then becomes essential to perform matching. Further evaluation of collection methods and of the safety and efficacy of donor stimulation for granulocyte collection may improve yields and

THEORETICAL RESULTS OF EXCHANGE TRANSFUSION*



*After Collins, JA: *Surgery* 75:274-295, 1974.

†1.0 Volume Exchange=Exchange involving equivalent of total blood volume, total plasma volume, or total red cell mass.

Figure 1

BLOOD PHERESIS/Panlilio

therefore clinical effectiveness of the products. Pheresis programs can support research programs as well. Large numbers of lymphocytes, platelets, granulocytes or large amounts of plasma for investigative purposes can be collected using cell separators. Stem cells have been collected by pheresis to repopulate marrow after chemotherapy of patients with neoplastic diseases.⁶ Abnormal cells have been harvested by pheresis for immunotherapy.⁷ The applications of pheresis are limited only by the imagination of those involved with it.

Acknowledgements: Development of a pheresis program requires a great deal of cooperative effort and support from many quarters. The authors wish to thank the Whitson family for making funds available to begin this program, and Dr. John Flexner of Vanderbilt University Medical Center who suggested this project to the family. Mr. James Cundall, director of Technical Services; Mrs.

Barbara Grooms, charge nurse; and Mrs. Dorothy Miller, charge nurse (all of the Red Cross Blood Program) made outstanding contributions to the early development of the pheresis program. More recently, Barbara Grimm, R.N., Gwen Underwood, R.N. and Doug Smith have joined the above staff to assist in the growth and development of the program.

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SUMMER TRAINING PROGRAM FOR MEDICAL STUDENTS

Next summer marks the initiation in Tennessee of a program designed to orient preclinical medical students to the demands and rewards of community and primary care practice. The program is the Medical Education and Community Orientation Project (MECO), sponsored by the American Medical Student Association's Foundation. MECO is endorsed nationally by the American Medical Association and the American Academy of Family Physicians.

First and second year students from Tennessee's four medical schools will spend four to ten summer weeks in a community hospital, clinic, or solo or group practice setting under the direction of a local physician in a patient-oriented health care approach. In addition, students will learn about the organization and operation of community health services, the roles of other health professionals, and mechanisms for continuing education in a nonacademic setting. The physicians participating in MECO can earn hour for hour credit toward the AMA Physician's Recognition Award, up to a maximum of 45 hours; they can receive up to 30 hours of continuing education credit from the AAFP. In addition, these physicians will have the satisfaction of participating in the training of future colleagues. It is hoped that this experience will motivate medical students to remain in Tennessee's health care need areas upon completion of their training.

Interested physicians, hospitals and students may obtain additional information and application materials from the Tennessee MECO Project Directors: Yolanda Huet-Vaughn, Box 265, Meharry Medical College, Nashville, TN 37212; or Fred Ralston, Box 63212, Memphis, TN 38163.

Mammography in Screening for Early Breast Cancer

A report of two years' experience at the Vanderbilt Breast Cancer Detection Demonstration Project

M. DEE INGRAM, JR., M.D.; HENRY P. PENDERGRASS, M.D., M.P.H.; A. EVERETTE JAMES, JR., M.D., J.D.; and CARLOS MUHLETALER, M.D.

Introduction

In 1963, the Health Insurance Plan of Greater New York (HIP), with National Cancer Institute (NCI) support, began a randomized control trial to test the efficacy of periodic screening for breast cancer utilizing mammography and physical examination. Early reports from the HIP study indicated reduced breast cancer mortality in the screened group as compared to a matched control group of women.¹

Based on favorable evidence generated by this study, the directors of the American Cancer Society agreed to support a number of breast cancer detection centers. These centers were designed to answer operational questions related to screening for breast cancer. Subsequently, the National Cancer Institute agreed to cosponsor this endeavor and suggested expansion of the scope of the original American Cancer Society proposal. A detailed data collection network was established to measure the success of the projects by a number of criteria. Twenty-seven Breast Cancer Detection Demonstration Projects (BCDDP) supporting 29 screening centers were set up in selected cities in a variety of medical institutions and a broad diversity of communities in the United States.²

In each project, approximately 10,000 women were enrolled in a plan designed to follow these individuals over a period of five years, with annual screening examinations. At the completion of the project, 270,000 women will have been screened. If successful, these demonstration projects will have documented the use and effectiveness of large scale screening for carcinoma of the breast, utilizing the modalities of clinical history and thermographic examinations in ad-

dition to mammography and physical examination.

In January 1975, the Vanderbilt Breast Cancer Detection Demonstration Project began its activities as part of the nationwide program. This communication will summarize the results of the center's efforts in mammographic screening and compare the histopathology of the 73 unsuspected carcinomas of the breast discovered at Vanderbilt with the results of a nationwide surveillance study, the SEER study.*

Methods and Materials

The radiographic equipment included a Tungsten target overhead tube (1.2 focal spot) with a fixed focal film distance of 60 cm, using a metal compression cone.³ The cone was constructed to allow balloon compression of the breast. A single phase full rectification 300 MA generator was also employed. Manual x-ray exposures were adjusted according to breast density and compressibility. While the values of MAs remained constant, the technologist varied exposure by changing the KVP, usually from 28 to 40. Dosage studies of both machines used reveal an exposure of approximately 1 rad per examination (two views) to the midpoint of the breast.

The 10,000 women in the Vanderbilt study were recruited from the general population of the area, without the referral of a physician. The only stipulations were age (between 35 and 74) and that she be asymptomatic, i.e., no present breast problems.

From the Department of Radiology and Radiological Science, Vanderbilt University Hospital, Nashville, TN. 37232.

This project is supported by the National Institutes of Health, DCCR Contract # NO1-CN-55099.

* The SEER program is a national Survey of Epidemiology and End Results of all forms of cancer. The study comprises approximately 10% of the U.S. population and is being conducted in centers throughout the country to represent a cross-section of race and lifestyle. Preliminary results were given in the Beahrs report, reported at the NIH/NCI Consensus Development Meeting, September 1977, at Bethesda, Md.

Results

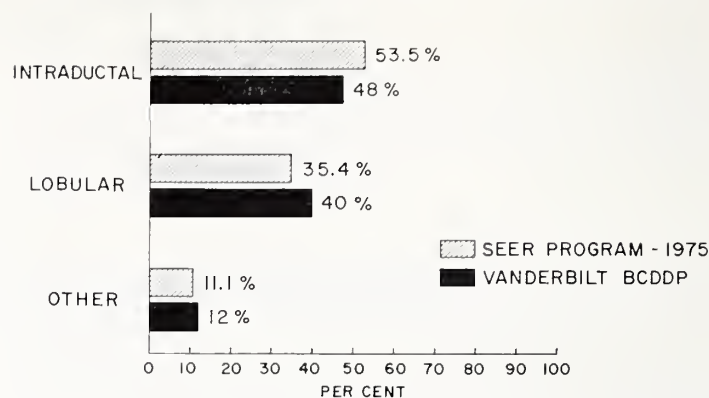
Among the 10,000 women screened at the Vanderbilt Center, 73 unsuspected carcinomas of the breast have been found. In analysis of those 73 cancers, there have been 25 (34.2%) non-infiltrating cancers, i.e., no invasion through the basement membrane, and 48 (65.8%) infiltrating carcinomas.

Only 13 (17.8%) of the 73 breast carcinomas had evidence of axillary nodal involvement. If it is generally true that the patient's prognosis is better when the tumor is diagnosed and treated earlier,⁴ those 60 patients (82.2%) without axillary involvement should be benefited by their participation in the Vanderbilt screening program.

Figure 1 is a comparison of the Vanderbilt BCDDP findings with the SEER results by infiltrative status. From this, one learns that in the SEER study only 5% of the lesions were non-infiltrative whereas at Vanderbilt, the percentage was much higher—34.2%. Additionally, the percentage of lobular carcinomas, both infiltrative and non-infiltrative, is higher in the Vanderbilt study (Fig. 2). Lobular carcinomas, which arise in the breast lobules rather than the ducts, have a remarkable tendency to occur bilaterally. There is, however, much better prognosis because of their relatively benign characteristics.⁴

Discussion

Breast cancer occurs primarily in women over the age of 35 years. It is estimated that in 1977, there will be about 90,000 new cases of breast cancer and 34,000 deaths related to this process in American women.² In spite of continuing modifications and improvements in surgical and other treatment modalities such as radiotherapy and chemotherapy, the breast remains the leading site



BREAST CANCERS BY HISTOPATHOLOGY - INFILTRATIVE

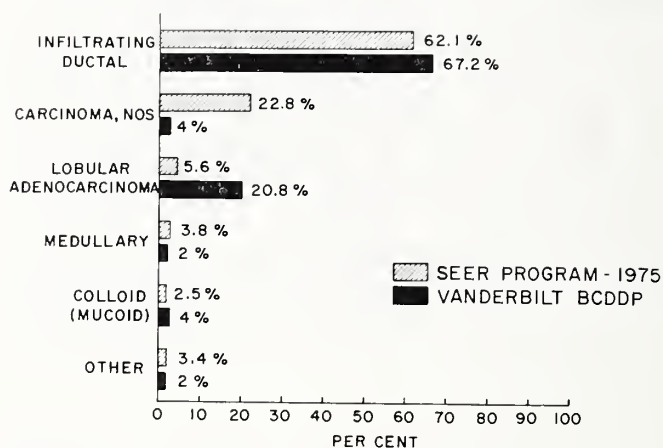


Figure 2. Illustrates the greater percentage of lobular carcinomas found at the Vanderbilt BCDDP.

of cancer incidence and death among women.⁴

There is general agreement that in breast cancer, as with many other neoplasms, detection and treatment of the disease at an early stage leads to a more favorable prognosis. The Memorial Hospital experience shows a 76% ten-year survival for patients with invasive carcinoma limited to the breast as opposed to only a 36% ten-year survival for patients with metastasis to the axilla at the time of discovery and treatment.⁵ Leis⁴ has reported survival of up to 97.1% in breast carcinomas of under 1 cm in size. A large scale study at Emory University Hospital of 637 breast cancer patients over a 20-year review period reported a 79% ten-year survival rate for patients with negative nodes as compared to only a 29% ten-year survival rate for those with positive nodes.⁵

The reports at the recent NIH/NCI Breast Cancer Consensus Development Meeting (Bethesda, Md., Sept. 14-16, 1977) indicate that a later analysis of the HIP data supports the earlier reported results⁶ of reduced breast cancer mortality related to periodic screening with clinical examination and mammography. However, it appears that the reduced breast cancer mortality

Continued on page 191

BREAST CANCERS BY INFILTRATIVE STATUS

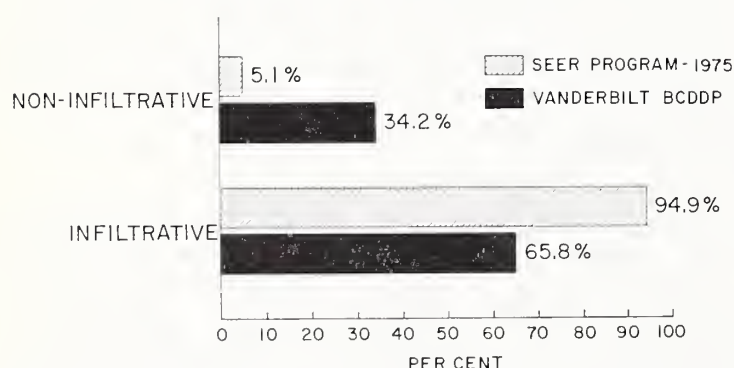


Figure 1. A comparison of the Vanderbilt BCDDP findings with the SEER study—by infiltrative status.

Tularemia Presenting as Unresponsive Pneumonia: Diagnosis and Therapy with Gentamicin

ROGER T. JACKSON, M.D., and JAMES P. LESTER, M.D.

Recently we have observed an unusual presentation of tularemia pneumonia which progressed to severe respiratory insufficiency requiring mechanical ventilatory assistance before the diagnosis was made and effective antibiotic therapy instituted.

Case Report

A 59-year-old Greek immigrant became ill with malaise and fever at his suburban home. For two days he had fever of 103 F and general malaise, at times with a profuse diaphoresis, but without pain or respiratory symptoms except for a slight nonproductive cough. On the third day he visited a physician who elected only to observe his fever. Two days later the patient returned with right pleuritic chest pain, and chest x-ray revealed a right lower lobe pneumonia. The patient was hospitalized, cultures of sputum and blood were taken, and he was begun on minocycline, 50 mg q 6 h PO, which was continued for seven days.

Blood cultures on admission reported no growth, and sputum cultures showed only normal flora with a light growth of *Enterobacter* species. The WBC was 14,000, and the hematocrit was 33%. The chest x-ray showed progression of a consolidating pneumonia to involve the right middle and lower lobes, the left lingular area and left lower lobe. Pleural effusion was apparent on the right. Because of persistent daily fever to 103 F and progression of the pneumonia, the patient was transferred to the intensive care unit on the eighth day of hospitalization. Arterial blood gases showed a PO_2 of 45 and PCO_2 of 28, with pH of 7.51 on 30% O_2 by ventimask. An endotracheal tube was inserted and later a tracheostomy was performed to allow for mechanical ventilation.

At this time scrupulous physical examination showed no lymphadenopathy, splenomegaly or skin lesions. The pharynx was normal. The cardiac exam was normal except for a pleuropericardial friction rub, and there was moderate tenderness to percussion over the liver and palpation of the right upper quadrant, although the liver edge was not palpable.

The chest examination showed striking bronchophony over the right axillary chest wall with dullness to percussion, and elsewhere throughout the right and left lower lungs diffuse crackling rales were present. Sputum examination by deep tracheal aspiration showed polymorphonuclear and mononuclear cells and only rare Gram-positive cocci; no Gram-negative bacilli were

seen. Thoracentesis was performed in the right pleural space yielding 150 ml of serous fluid, culture of which was sterile. Cytologic preparation from the fluid showed degenerative polymorphonuclear cells and mononuclear cells.

Other laboratory studies revealed an alkaline phosphatase of 220 units (normal to 120); other liver function tests were normal. The albumin was 2.8 gm%.

Because the patient appeared critically ill, with severe respiratory impairment and a progressive, consolidating pneumonia, cephalothin and tobramycin were initially begun to cover what appeared likely to be Gram-negative or staphylococcal pneumonia. After 36 hours this was changed to chloramphenicol and carbenicillin. Sputum cultures from the tracheal aspirate revealed only a light growth of *Enterobacter* species and alpha-streptococci.

The patient's family denied any personal or family history of tuberculosis, and also denied any history of exposure to fowl, wild animals, untreated water, or any exposure to individuals with obscure illnesses. The patient worked in a shoe factory. Because of continued fever to 103-104 F, deterioration of pulmonary function by arterial blood gases, and the progression of the pneumonia by chest x-ray, the patient was placed on methicillin and gentamicin on the tenth hospital day. The patient was also given 2 gm methylprednisolone over the next 24-hour period. On the morning of the 11th hospital day, a tularemia titer of 1:160 was reported. All antibiotics except gentamicin were discontinued and the gentamicin level was measured to assure adequate peak (> 5 mcg) levels. This required 2.0 mg/kg of gentamicin every eight hours.

Defervescence occurred following the bolus of corticosteroids and continued with the gentamicin therapy (Fig. 1). The patient was extremely debilitated and an

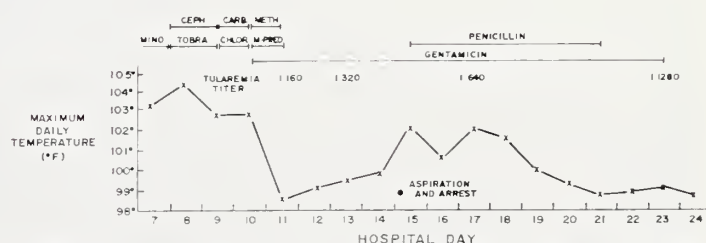


Figure 1. Hospital course indicating daily fever and antibiotic administration.

ileus with right upper quadrant tenderness persisted. Liver-spleen scan showed moderate hepatomegaly with normal uptake and normal spleen size. The pulmonary infiltrates cleared gradually, and the recovery was complicated by an episode of aspiration with ventricular fibrillation, from which the patient was successfully resuscitated with electrical cardioversion. Penicillin was added for one week to the antibiotic therapy when the chest x-ray showed a large new left lower lobe infiltrate following the aspiration.

A total of 14 days of gentamicin therapy was given and the patient was discharged on doxycycline, 100 mg daily, which was continued for one month at home. At follow-up three months after discharge, chest x-ray showed a residual right pleural reaction, although the patient was afebrile and clinically recovered (Fig. 2A-B). Tularemia titer was 1:160 on the 11th hospital day, 1:640 on the 19th hospital day, and 1:1280 on the 23rd and final hospital day.

When questioned during recovery, the patient was able to state that his cat had brought a dead rabbit into the basement. His wife had disposed of the dead rabbit and the patient had not touched it. Approximately one week later, the cat had a litter of kittens that all died by the second and third day, and the cat died soon after. The patient had handled the sick cat, but denied being scratched or bitten and denied any skin ulcers or pustules. Within the next seven to ten days, the patient became ill.

The patient has remained well with no relapse, and returned to work four months after the onset of this illness.

Discussion

Although pneumonic tularemia occurs infrequently, this case illustrates the need to consider tularemia in pneumonias which progress in the face of antibiotic therapy adequate for the usual pathogens. The Gram stain of sputum and pleural fluid cytology were of some aid in considering tularemia in this case. Both showed a moderate number of polymorphonuclear leukocytes and mononuclear cells. The unusual presence of the large number of lymphocyte and monocyte/macrophages led us to suspect an intracellular organism such as tuberculosis or tularemia. Similar polymorphonuclear and mononuclear/macrophage effusions have been described in tularemia.¹

In most cases of tularemia contact with wild animals, especially rabbits, ticks, or pets which have been infected from wild animals, can be elicited by a detailed history. In our case this eventually revealed the rabbit to pet cat exposure, a type of transmission that has previously been reported.² Nearly all cases of tularemia pneumonia present with cutaneous lesions or lymphadenopathy as a clue to the diagnosis. Care-

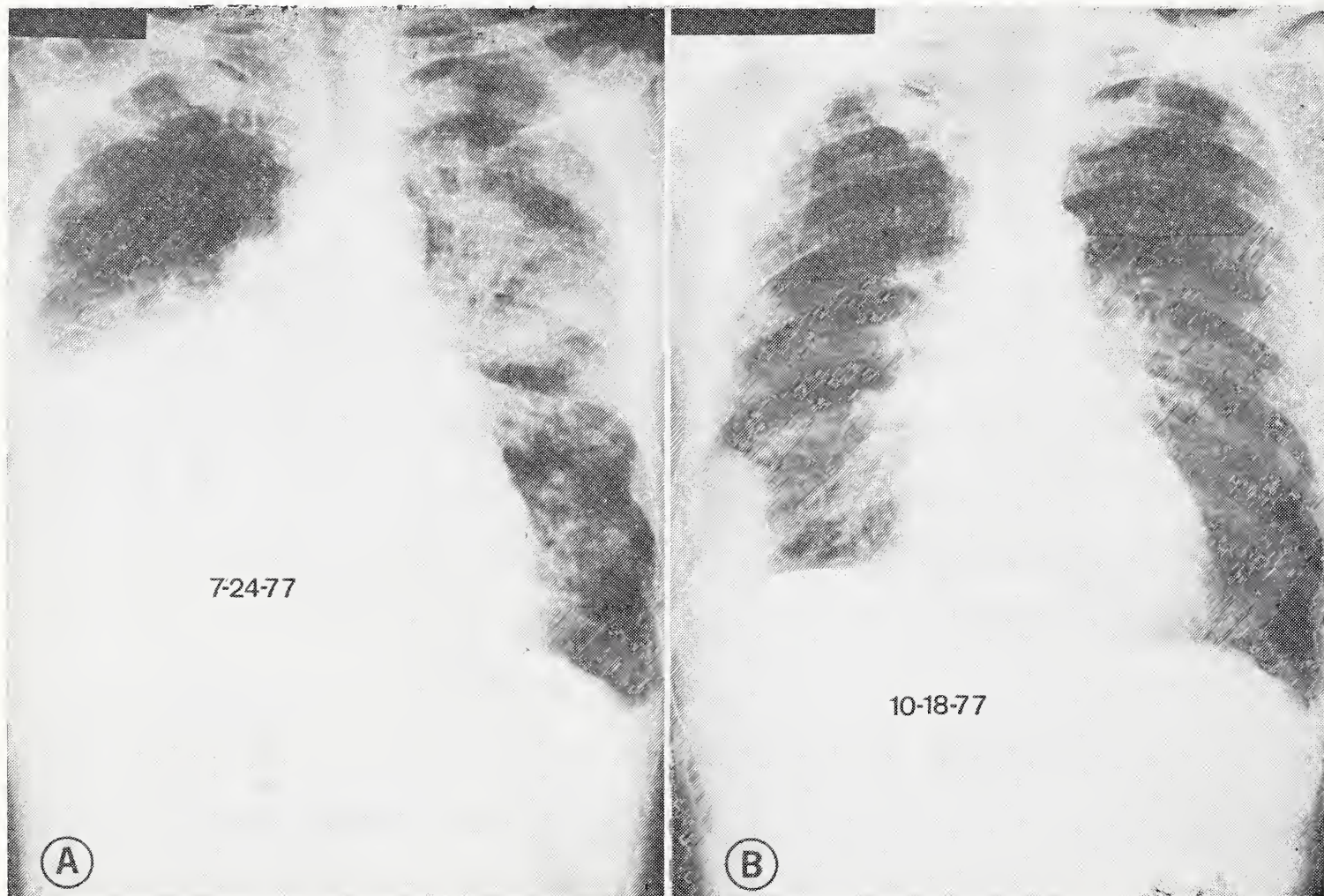
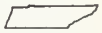


Figure 2. (A) Chest x-ray showing right pleural effusion, right lower and middle lobe consolidation, and infiltration in the left lingula and left lower lobe at beginning of gentamicin therapy. (B) Follow-up chest x-ray showing residual right pleural reaction only.

ful examination of this patient two weeks after he first became ill revealed no lymphadenopathy or skin lesions and the patient denied any skin lesions when questioned. Small lesions that subsequently heal have been reported to initiate the bacteremia leading to pneumonia and other organ involvement. Although this case is suggestive, we cannot document inhalation as the route of infection.

Antibiotic therapy is usually effective with tetracycline or streptomycin. The fact that seven days of minocycline therapy orally was of no benefit may be explained by the remarkable ileus which was observed, with poor oral absorption or nausea and vomiting. Gentamicin has been used successfully in treating tularemia in recent

reports.^{3,4} We chose to continue gentamicin therapy as the patient was responding clinically and gentamicin serum levels were readily available to assure adequate but nontoxic levels. 

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Mammography...

Continued from page 188

(about 40%) is documented primarily in women 50 years of age and older. At the present time, from a statistical viewpoint, no benefits of screening are evident in women at ages 40 to 49 years.⁷

Mammography is the only currently proven method of discovering breast cancer prior to the development of physical signs and symptoms. It should be emphasized that mammography is not a substitute for biopsy. For this reason, whether found by palpation alone, mammography alone or both, every suspicious lesion should be removed for histopathologic study. As a general rule, any suspicious lesion requires a biopsy, regardless of the mammographic findings. In occult lesions demonstrated by mammography (where specimen radiography is used to insure that the lesion has been removed) axillary nodes have been found to be free of metastatic disease in almost 100% of the cases.⁴

This preliminary report indicates the importance of mammography in discovering early non-invasive carcinoma. The early detection of breast cancer may lead to a reduction in mortality or to

improved surgical procedures and greater patient acceptance. We believe mammography is no longer an experimental procedure; it is an important modality in the diagnosis and treatment of breast cancer. 

Acknowledgement: Particular credit is due the volunteers of the local chapters of the American Cancer Society, who were instrumental in helping the project to get underway.

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Ampicillin-Resistant *Hemophilus Influenzae* Type B Orbital Cellulitis

CHURKU MOHAN REDDY, M.D.

Orbital cellulitis is usually due to a direct extension into the orbit from infected paranasal sinuses.^{1,2} *Staphylococcus aureus*, *Streptococcus pyogenes*, *Escherichia coli* and *Streptococcus pneumoniae* are the most common etiologic organisms involved. Recently however *Hemophilus influenzae* has been recognized as an important etiological agent of orbital cellulitis.³⁻⁵

This communication describes an infant with ampicillin-resistant *H. influenzae* type b orbital cellulitis and represents the first reported case of this nature. Therapeutic modification is thus suggested where orbital cellulitis due to *Hemophilus* is suspected.

Case Report

A 9-month-old black male infant was admitted to the hospital 30 hours after fever, swelling and tenderness developed in the right orbital area. Temperature on admission was 39.9 C. The pulse rate was 140 per minute and respirations were 31 per minute. Examination of the right orbital region revealed marked orbital edema and periorbital blue-purple discoloration. Proptosis, limitation of eye movements, chemosis and injection of the conjunctiva were present. The cornea was clear but the lens, vitreous and the fundus of the right eye could not be visualized. No other physical abnormalities were noted.

Pertinent laboratory data included a white blood cell count of 18,400/mm³ with segmented neutrophils 75% and lymphocytes 25%. Hemoglobin concentration was 13.6 gm/100 ml and sickle cell preparation was negative. *Staphylococcus epidermidis* and *Klebsiella pneumoniae* grew on culture of material from the right conjunctiva and nasopharynx respectively. Roentgenograms of the sinuses were reported as normal.

Initial therapy consisted of intravenous infusion of ampicillin 200 mg/kg/day and chloramphenicol 100 mg/kg/day with a local application of garamycin ophthalmic ointment at six-hour intervals. Subsequently a blood culture taken on admission grew *H. influenzae* type b confirmed by the Tennessee Department of Public Health Laboratories. Disc sensitivity testing on chocolate agar showed resistance to ampicillin. The tests

were repeated for confirmation with identical results. At the receipt of the sensitivity data, administration of ampicillin was deleted from the therapeutic regimen. Chloramphenicol was continued intravenously for five days and then was given by mouth for another five days. Temperature returned to normal within 24 hours after the initiation of therapy; swelling, tenderness and redness decreased within 48 hours; and the orbital cellulitis subsequently cleared. After the initial positive blood culture, subsequent blood cultures (third and seventh hospital day) were negative. On the ninth hospital day the peripheral WBC was 11,400/mm³ with a normal differential. The infant was discharged in a satisfactory condition after a ten-day hospital stay.

Discussion

Orbital cellulitis is characterized clinically by ocular pain, lid edema, chemosis and injection of the conjunctiva, orbital tenderness, proptosis, limited ocular movements, fever and leukocytosis.¹ *Hemophilus influenzae* orbital cellulitis occurs infrequently in children. It usually affects children under 36 months of age.³ Orbital cellulitis is usually caused by extension from infected paranasal sinuses, most commonly the ethmoid sinus.^{1,2,5} There was no evidence of any underlying condition which predisposed to the development of orbital cellulitis in our patient.

The characteristic periorbital purple discoloration has been frequently noted with *H. influenzae* orbital cellulitis^{3,4} and was present in our patient. Cultures of the conjunctiva and nasopharynx may disclose the offending organism but results can be misleading.⁵ Blood culture is the most reliable method and determines the cause of the condition.⁵ Cultures of the conjunctiva and nasopharynx revealed *Staphylococcus epidermidis* and *Klebsiella pneumoniae* respectively. *Hemophilus influenzae* type b was isolated from blood culture of the infant and thus etiologic diagnosis was established. Sensitivity testing by disc method revealed ampicillin resistance. The pitfalls of these methods as opposed to dilution techniques

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are recognized.⁶ However, if chocolate agar is used with preparation of the inoculum with enriched media, ampicillin resistance is significant.⁷

Ampicillin has been the drug of choice for the treatment of *H. influenzae* infections,⁸ but recent reports of ampicillin-resistant strains have evoked considerations of altering the initial therapeutic regimen when *H. influenzae* infection is encountered.^{9,10} Owing to recent experience with ampicillin-resistant strains in our medical center,¹¹ the infant was treated at first by intravenous administration of ampicillin and chloramphenicol. On receipt of sensitivity data, ampicillin was deleted from the therapeutic regimen and chloramphenicol was continued for a total of ten days.

The Committee on Infectious Diseases of the American Academy of Pediatrics¹⁰ and recent literature indicate ampicillin plus chloramphenicol should be the initial regimen in the management of severe infections due to *H. influenzae* type b. At present initial therapy is often methicillin and ampicillin.^{3,4} On the basis of characteristic purple discoloration we should be able to make the presumptive diagnosis of orbital cellulitis due to *H. influenzae* and a combination of

ampicillin and chloramphenicol should be considered as the initial regimen. When the physician is in doubt about the diagnosis of orbital cellulitis due to *H. influenzae*, initial therapy should include chloramphenicol, which is effective against ampicillin-resistant *H. influenzae* strains, in addition to ampicillin and methicillin in the management of orbital cellulitis.

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Sarcomas of the Heart and Great Vessels

F. ANTHONY GRECO, M.D., Editor

The management of advanced soft tissue sarcomas has significantly changed during the past few years. Although the available modes of therapy are still far from being ideal, response rates as high as 55% have been reported utilizing combinations of various agents.^{1,2} Accurate interpretation of therapeutic achievements are made difficult due to the presence of a wide range of histologic subtypes, varying degrees of differentiation, metastatic sites, and location of the primary lesion. All of the above factors influence the response rates and prognosis.

We recently managed two patients who presented with sarcomas involving very critical parts of the cardiovascular system: the pulmonary artery and the heart. Today we will discuss these two patients and present a review of the literature relating to their problems.

MEHMET F. FER, M.D.:

Patient 1—(VU#509950). This 46-year-old white man was first seen at Vanderbilt Hospital in April 1977 for evaluation of hypertension and urolithiasis. Work-up at the time was negative and he was thought to have essential hypertension and urolithiasis secondary to dietary factors. Interestingly, his mother, seven sisters and two daughters all suffered from recurrent kidney stones.

Shortly after his discharge from the hospital in April 1977 he had an acute onset of dry cough and pleuritic chest pains which persisted at rest and on exertion and gradually got worse over the following months. He lost 5 lb in six months and had an episode of hemoptysis two months prior to admission.

Physical Examination: P 96/min, BP 150/85, R 32/min, T 98 F. He was dyspneic and coughed frequently. Breath sounds were decreased throughout the left lung, with a pleural friction rub on the left. P2 was loud and he had a right ventricular heave and a grade 1/6 systolic murmur over the pulmonary outflow tract and apex. The remainder of the examination was normal.

Laboratory data: Hb 14; PCV 43; WBC 10,600; ABG pH 7.47, PO₂ 63, PCO₂ 35, Ca ++10.6, PO₄ 2.3. Liver function tests were normal. Chest x-ray showed an elevated left hemidiaphragm and an infiltrate or ill-defined mass in the left lung field. EKG showed left ventricular hypertrophy; echocardiogram was normal. Lung scan showed obliteration of flow to the entire left lung and a defect in the right apex. He was anticoagulated with heparin without benefit.

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Pulmonary arteriogram showed a large defect with almost complete occlusion of the left pulmonary artery and no perfusion to the right upper lobe. An inferior vena cava umbrella was placed but symptoms continued. He was taken to surgery for pulmonary embolectomy and a piece of material which appeared to be an organized clot was removed from the left pulmonary artery. Histologic examination showed poorly differentiated sarcoma. Repeat pulmonary arteriogram postoperatively showed no flow to the left lung or to the right upper lobe. Two weeks after surgery he was started on chemotherapy with cyclophosphamide (Cytosan) 1,000 mg/m², doxorubicin (Adriamycin) 80 mg/m², and vincristine (Oncovin) 1 mg/m².

Dr. Smith will interpret the radiographic studies.

CLYDE W. SMITH, M.D.:

The chest film revealed elevation of the left hemidiaphragm and linear markings in the left costophrenic angle compatible with localized areas of atelectasis or fibrotic scars secondary to an old infiltrate.

The preoperative pulmonary arteriogram (Fig. 1) shows a filling defect in the left main pulmonary artery with filling of only a few small left pulmonary vessels about the hilum. The majority of the left lung is not perfused. The right upper lobe pulmonary artery is occluded at its origin. The smooth contour at the origin of the right upper lobe pulmonary artery does not suggest an acute embolus. Statistically, the best

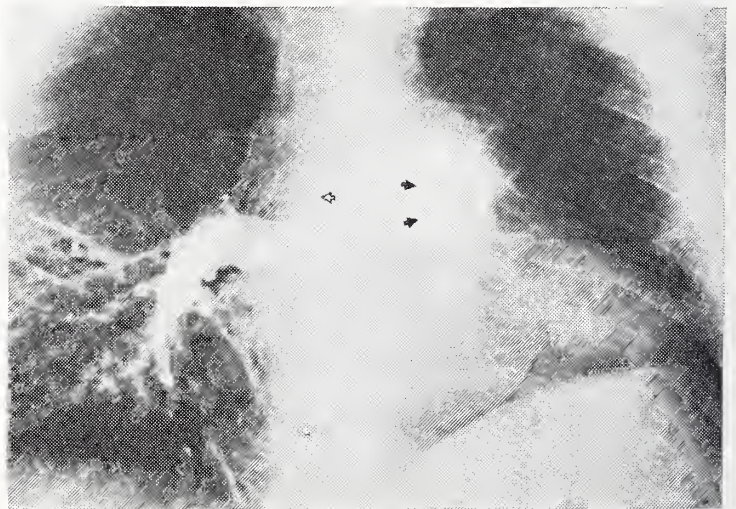


Figure 1. Pulmonary artery sarcoma. Tumor mass in the left pulmonary artery (closed arrows). Occluded right upper lobe pulmonary artery (open arrow).

diagnosis would be pulmonary emboli, age indeterminate.

DR. FER:

Patient 2—(VU#689754). A 27-year-old white man was referred for anemia, fever, and arthralgia. He was well until August 1976 when he started having progressive dyspnea, fatigue, and fever to 101-102 F. In October 1976 he noted swelling in the distal interphalangeal joints, with generalized stiffness, worse over the knees and ankles, and swelling over the legs. He was slightly anemic. In December 1976 he had an episode of aphasia that lasted several hours, and several days later he felt very stiff over his body and could not use his hands. He partially recovered and resumed work although he was weak and had fever of 100-101 F, with persistent joint pain. One month prior to admission he had throbbing frontal temporal headaches and developed a cough with white sputum, night sweats, and nausea and vomiting, leading to his referral to Vanderbilt University Hospital. Over the past year he had lost 30 lb with progressive loss of appetite. Extensive investigations previously had failed to yield a diagnosis. His past medical history and family history was unremarkable.

Physical Examination: P 100/min, T 103 F, BP 100/70, R 14/min. He appeared toxic and had marked clubbing of his fingers and toes with subungual erythema. On cardiac auscultation he had a loud P2 and a soft-grade 1/6 apical systolic murmur. Remaining examination was normal.

Laboratory data: Hb 9.5; Hct 32; WBC 10,700; platelets 359,000; ABG pH 7.58, PO₂ 65, PCO₂ 27. Peripheral blood smear showed erythrocytes to be hypochromic, microcytic. Chest x-ray: double density over the right side of the heart with posterior bulging consistent with left atrial enlargement and borderline increase in pulmonary vascularity. EKG: sinus tachycardia and counterclockwise rotation. Alkaline phosphatase 253, SGOT 77, SGPT 63, LDH 253.

Echocardiogram showed a probable left atrial mass and possible posterior mitral leaflet vegetation. Cardiac catheterization showed a left atrial mass lesion which was not pedunculated. Brucella agglutinin titer: 1:1280, indicating active brucellosis. He was started on tetracycline and streptomycin. On Oct. 5, 1977 thoracotomy

was done and an unresectable sarcoma was found extending from the right chest and lung along the pulmonary vessels into the left atrium and across the posterior aspect of the heart. Light and electromicroscopy showed an undifferentiated sarcoma. Postoperative recovery was uneventful. He was discharged on tetracycline, to receive radiotherapy in his local hospital and to be considered for chemotherapy.

Dr. Smith will show us the radiographs.

DR. SMITH:

The cardiac series shows mild pulmonary venous hypertension and increased subcarinal density compatible with left atrial enlargement. Barium in the esophagus is deviated to the left in the region of the left atrium. This is unusual, but not unheard of in the presence of left atrial enlargement. On the lateral and right inferior oblique films there is soft tissue density posterior to the esophagus, compatible with an obstruction at the level of the mitral valve or within the left atrium. The deviation of the esophagus to the left and the density posterior to the esophagus, with evidence of only mild left atrial enlargement, would make one suspect a mass posterior to the heart.

An injection was made into the right pulmonary artery (Fig. 2). On the levo phase, as the contrast medium fills the left atrium and left ventricle, a large, immobile filling defect is identified within the left atrial cavity.

A left atrial myxoma produces a filling defect within the left atrium, but that mass is usually mobile and falls in the mitral valve orifice in ventricular diastole. Statistically, the best radiographic diagnosis would still be left atrial myxoma.

Dr. Johnson will discuss the pathology.

RICHARD L. JOHNSON, M.D.:

Histologically, these two cases are similar in that both are poorly differentiated sarcomas. In patient 1 (Fig. 3), areas suggestive of fibro-

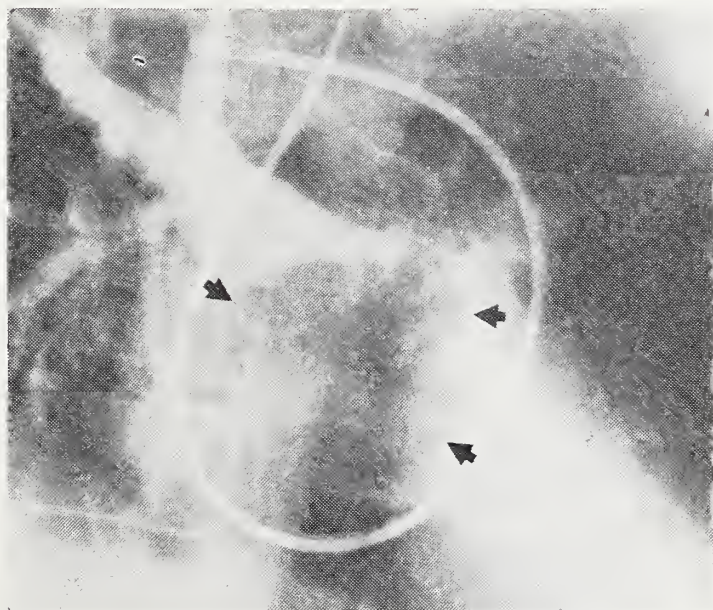


Figure 2. Left atrial sarcoma. Large left atrial tumor mass (arrows).

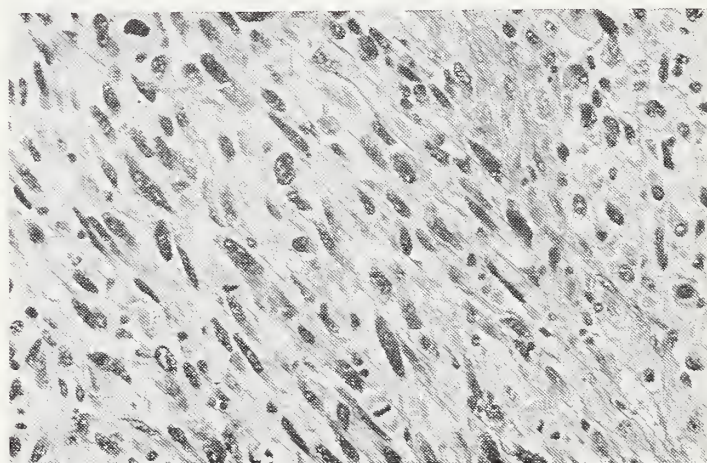


Figure 3. Photomicrograph of the primary sarcoma of the left main pulmonary artery showing undifferentiated spindle cells with anaplasia and numerous mitoses.

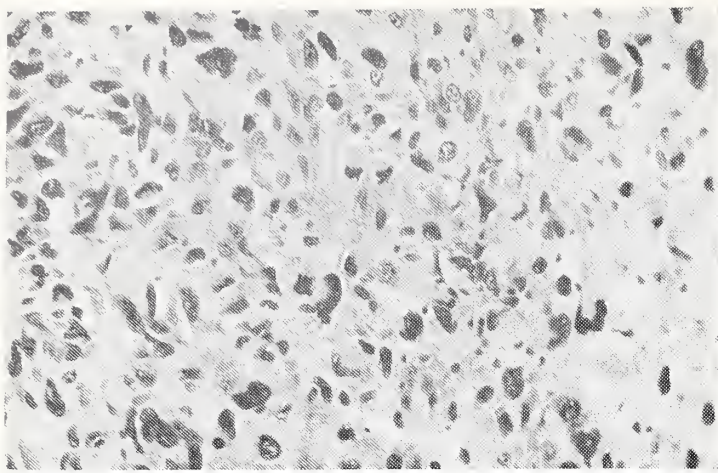


Figure 4. Photomicrograph from the left atrial biopsy showing an undifferentiated sarcoma composed of anaplastic cells with pleomorphic nuclei.

sarcomatous and leiomyosarcomatous differentiation can be found on some slides, but the overall appearance is that of a poorly differentiated sarcoma. The diagnosis of sarcoma was confirmed by electron microscopy but subclassification into a specific cell type was not possible.

In patient 2, the light microscopy showed a poorly differentiated sarcoma without evidence for either a leiomyosarcoma or a rhabdomyosarcoma. Electron microscopic findings were consistent with a diagnosis of sarcoma although the tumor cells did not show sufficient evidence for myoid differentiation (Fig. 4).

Malignant primary tumors of the heart are sarcomas with most arising in the myocardium or pericardium. Since a neoplasm may develop from any derivative of mesenchyme, this creates a number of possible tumors: rhabdomyosarcoma, leiomyosarcoma, angiosarcoma, hemangiosarcoma, fibrosarcoma, myxosarcoma and other variations. The separation of some of these tumors may be impossible among poorly differentiated neoplasms unless differential histologic criteria are recognized. Unfortunately, this has lead to such descriptive terms as giant cell, round cell, polymorphous cell and spindle cell sarcomas, terms which should be avoided as they do not specify the cell of origin.

DR. FER:

These two interesting patients prompted us to review the literature regarding sarcomas of the heart and neighboring great vessels. Although these tumors represent a very unusual clinical problem, they are being recognized with increasing frequency, and with the recent advances in cardiovascular surgery and cancer therapy, their outlook may improve. The greatest difficulty in diagnosis is due to the fact that they typically

mimic other common disorders, and this usually misleads the clinician. Although both of our patients were seen by numerous physicians before coming to surgery, the possibility of a malignant process was not a consideration in either case until pathologic diagnosis was made.

In a recent review of pulmonary artery sarcomas,³ 25 of the 35 cases reported in the literature were diagnosed at autopsy and the remaining ten cases at thoracotomy. Most of these patients presented with dyspnea (65%), other common symptoms being chest pain (40%), cough (40%), hemoptysis (30%), and syncope (23%). Patients' ages ranged from 22 to 81 and there was no significant difference in sexes. The physical findings were nonspecific and included precordial systolic murmurs (64%), cyanosis (50%), and jugular venous distention (27%). Only 11% had diastolic murmurs at the pulmonic area and 35% had weight loss. X-ray findings were also nonspecific. Hilar or mediastinal mass was seen only in 38% of the patients and 21% had enlarged pulmonary arteries, while 24% had decreased pulmonary vascularity. The most accurate diagnostic tool was arteriography. On all eight patients who had this study, a large filling defect was found in the pulmonary artery. The most common site was the pulmonary trunk with extensions of the tumor to the main pulmonary arteries. The tumor was attached to the pulmonic valve cusps in one half of the patients and extended to the right ventricular outflow tract in one third of the cases. The most common histologic types are listed in Table 1.

Other types that were seen included fibroleiomyosarcoma, rhabdomyosarcoma and myxosarcoma. The major pattern of tumor spread was in the form of embolization to distal pulmonary vessels. They did not infiltrate through the arterial wall. Sixteen percent had involvement of mediastinal and hilar lymph nodes and only three patients of 32 had distant metastasis at autopsy. The extension patterns of these tumors into the pulmonic valve and to the right ventricle has been a subject of debate, and some authors have

TABLE 1
PULMONARY ARTERY SARCOMAS—HISTOLOGIC TYPES

Undifferentiated (38%)
Leiomyosarcoma (26%)
Fibrosarcoma (11%)
Fibromyxosarcoma (9%)
Malignant Mesenchymoma (9%)

claimed that such tumors are actually cardiac sarcomas infiltrating the pulmonary artery.^{1,4} Therapy has been surgical, if feasible, in most cases. Survival time from onset of symptoms has ranged from 1 to 39 months.

Experience with nonsurgical therapy is very limited. One reported case received Adriamycin on adjuvant basis with tumor recurrence at six months.³ In our search of the literature we could not find a case that received combination chemotherapy, and our patient is probably the first to receive such treatment.

The rationale for our choice of cyclophosphamide, Adriamycin, and vincristine is based primarily on information about adult soft tissue sarcomas in general. Adriamycin has an overall response rate of 30% in these tumors,¹ cyclophosphamide 20%, with possibly some synergism between these two agents as seen in animal models. Vincristine also has a 20% chance of response, and its toxicity does not overlap with the other two drugs. We hope to follow the patient with a repeat pulmonary arteriogram after two cycles to assess response. If he is failing to improve, we will consider changing therapy. It is now five weeks since he started the therapy and he appears to be doing well, with some persistent dyspnea on exertion. His calcium is down to normal levels, thus raising the question of tumor-related hypercalcemia.

Sarcomas of the other major vessels also occur. They are more frequent in veins than in arteries and most frequently involve the inferior vena cava, the majority being leiomyosarcomas.⁵⁻⁷ In a review of vena cava tumors, six of the eight were leiomyosarcomas, one fibrosarcoma and one leiomyoma.⁸

Forty-five cases of leiomyosarcomas of the inferior vena cava have been reviewed⁷ and have been related to four types of clinical syndromes⁵: Budd-Chiari syndrome, pseudocholecystitis, abdominal mass, and renovascular hypertension due to obstruction of the renal vessels. Results of various modes of therapy have been variable in these sporadic cases. Metastases were present in less than one half of the cases, and some authors favor a very aggressive approach to the primary lesion, especially if it is below the renal veins. If the tumor is above the renal vein level, surgery is more complicated. For lesions above the hepatic vein level, surgery is usually impossible, requiring hepatectomy and autotransplantation of the liver, which has not been successful so far. Postoperative radiotherapy has been given to re-

duce local recurrences and has been helpful in some cases. Another patient has been treated with intra-arterial Adriamycin followed by radiotherapy, surgery and immunotherapy, and was alive over four years after therapy.⁵

Primary sarcomas of the aorta are very rare. Most are fibrosarcomas or fibromyxosarcomas.^{9,10} An undifferentiated type of sarcoma has been described, which usually affects the lower aorta close to the bifurcation, while fibrosarcomas commonly arise in the thoracic aorta. Metastatic tumor deposits in the aorta are also possible with disseminated carcinomatosis.

Our second patient appears to have a sarcoma originating from the mediastinal structures which may include blood vessels, supportive tissues, or the heart. The incidence of primary tumors of the heart and pericardium in autopsy series ranges from 0 to 0.25%.¹¹ The first pathologic description of a cardiac tumor is attributed to Columbus in 1559. The first antemortem diagnosis of a primary cardiac tumor was in 1934. The rarity of this disease has been attributed to the lack of mitotic activity in the cardiac muscle, which usually reacts to injury in a degenerative fashion rather than regenerative. Metastatic tumors of the heart are much more frequent than primary cardiac tumors although it is still lower than what would be expected with the abundant blood flow to this organ. This is speculated to be due to the "strong kneading action of the heart," rapid blood flow, limited lymphatic supply and possibly metabolic factors.¹² Interestingly, only 5% to 10% of cardiac tumors (including benign tumors) give rise to clinical symptoms. These may include cardiac failure without apparent cause, unexplained dysrhythmias, heart block and syncope, embolic phenomena and valvular obstruction. Pericardial effusion is frequent, and the clinical picture is usually nonspecific, thus mimicking other more common entities. Systemic manifestations such as fever, weight loss, clubbing and anemia may occur, simulating bacterial endocarditis, antioimmune disease and rheumatic fever, as seen in our second patient. Approximately 75% of primary cardiac tumors are benign and over one half of these are myxomas and rhabdomyomas. Of the 25% which are malignant, sarcomas constitute 80%. Other less frequent malignancies include mesotheliomas and malignant teratomas.

More than 275 cases of primary myocardial and endocardial sarcomas have been reported in the literature.¹¹ The incidence is higher in men and all age groups may be affected. The right

TABLE 2
HISTOLOGIC TYPES OF CARDIAC SARCOMAS

Muscular Sarcoma (leiomyosarcomas and rhabdomyosarcomas)
Fibrosarcoma
Fibromyxosarcoma and Myxosarcoma
Malignant Vascular Tumors
Malignant Hemangioendothelioma
Kaposi's Sarcoma
Hemangiopericytoma

side has been involved more frequently than the left and the tumors originate mostly from the endocardium or pericardium, rarely from the myocardium. Histologic types are listed in Table 2. Leiomyosarcoma and rhabdomyosarcoma are the most common types, but the differentiation is often difficult and may lead to the term "muscle sarcoma" in some instances. Over 30% of cardiac sarcomas have distant metastases and the most common sites are lung, pleura, mediastinal lymph nodes, liver, kidneys, bone, pancreas, and adrenals. Survival time may vary from a few weeks to years. Sudden death may occur if the conduction system is involved, even in patients who are previously asymptomatic. Mesotheliomas may primarily arise from the conduction system and may also cause sudden death and heart block.^{13,14} There are about 30 case reports in the literature as such.

Although these tumors usually have infiltrative patterns, there may be bulges through the endocardium or pericardium. Echocardiography is a useful tool in diagnosis, although cardiac catheterization is usually necessary. Feasibility of surgery depends on extent and site of tumor. Radiotherapy and chemotherapy are indicated for unresectable disease. Agents including Adriamycin, cyclophosphamide, vincristine, and 5-FU have been tried sporadically with variable results.^{5,15,16}

Metastatic tumors of the heart are 20 to 40 times more common than primary cardiac tumors,^{17,18} and should always be a consideration when a patient with malignant disease develops congestive heart failure or dysrhythmia without other obvious causes. However, most remain asymptomatic. In one series of autopsied patients, 20% of those who died with cancer had involvement of the heart although only 8% of such patients were symptomatic. The solid tumor that most frequently metastasizes to the heart is malignant melanoma, with a 30% to 65% incidence in different autopsy series. Table 3 lists primary

TABLE 3
METASTATIC INVOLVEMENT OF THE HEART AND PERICARDIUM

Malignant Melanoma (30-65%)
Leukemia (30-50%)
Breast (30%)
Lymphoma (20%)
Parotid (20%)
Adrenal Cortex (12%)

cancers and the incidence of metastasis to the heart or pericardium at postmortem study. Radiotherapy has been used in selected cases, resulting in effective palliation.

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X-ray of the Month

JOHN M. MATHIS, M.Sc., M.D., and A. JAMES GERLOCK, JR., M.D.

The patient was a 39-year-old white female with previous history of hypertension. A renal arteriogram was taken (Fig. 1). What is your diagnosis?

- (a) Renal artery saccular aneurysm
- (b) Renal artery fibromuscular dysplasia
- (c) Renal neoplasm
- (d) Renal arterio-venous fistula

Aneurysms of the renal artery can be radiographically described as saccular, fusiform or dissecting. Saccular aneurysms like the one above are caused by atherosclerosis or trauma and are associated with fibromuscular dysplasia (FMD) in 9% of patients with FMD involving the renal arteries.¹ The location of saccular aneurysms is generally at the bifurcation of the main renal artery. Complications from these aneurysms consist of rupture, thrombosis, arterio-venous fistula and renovascular hypertension. Criteria for surgical resection consist of (1) size of aneurysm greater than 1.5 cm; (2) incomplete calcification of the aneurysm wall; or (3) any of the complications listed above.²

Fusiform aneurysms are almost always found in young hypertensive patients who are otherwise asymptomatic. This type of aneurysm is caused by a poststenotic dilation of the renal artery distal to an area of stenosis.² Angiography may reveal a renal infarction secondary to a thrombus in a vessel distal to the aneurysm—a common complication of the fusiform aneurysm.

Dissecting renal artery aneurysm usually presents with the abrupt onset of flank pain that may mimic renal lithiasis, hypotension secondary to retroperitoneal hemorrhage, and even death. Emergency intravenous urography may show a partially or totally nonfunctioning kidney without stone or obstruction. The need for immediate intervention is evident. This may require a reconstructive vascular procedure or may necessitate partial or total nephrectomy if infarction has occurred. All types of renal artery aneurysms are

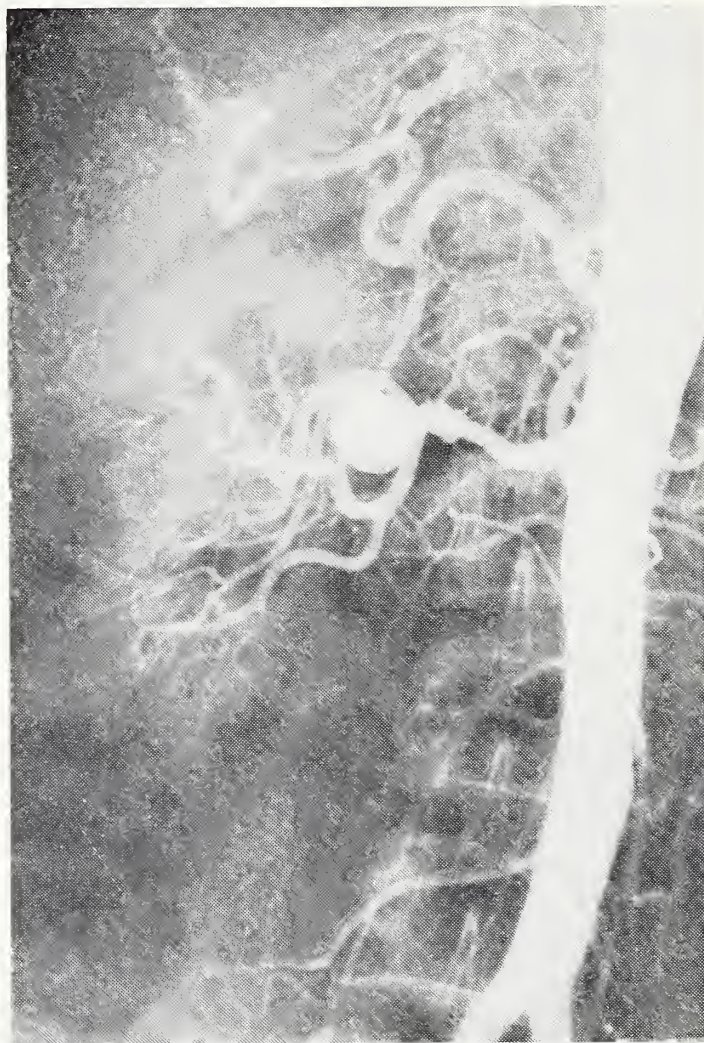


Figure 1

evaluated with arteriography to determine anatomical involvement and associated complications. In the nonacute situation renal vein renin determination with lateralization will reveal if hypertension is indeed of renal origin.

Answer: (a & b) Fibromuscular dysplasia of the renal artery complicated by a saccular aneurysm at the bifurcation of the main renal artery.

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From the Department of Radiology, Vanderbilt University Hospital, Nashville, TN 37232.

W. BARTON CAMPBELL, M.D.

A 61-year-old woman with a history of recurrent episodes of congestive heart failure was seen in the St. Thomas Hospital emergency room for evaluation of episodes of "light-headedness." She had a previous history of congestive cardiomyopathy and had been on digoxin (Lanoxin) 0.25 mg orally daily. Three days preceding admission she complained of increasing anorexia and nausea, and had had two episodes of vomiting. She had been taking furosemide (Lasix) 80 mg orally daily. Examination revealed a chronically ill appearing woman with a blood pressure of 95/70. Bilateral basilar rales were audible. She had an irregularly irregular rhythm with occasional cannon A waves in the jugular venous pulse. The jugular venous pulsations were noted at the mid-neck level at 50° of elevation. She was placed on the electrocardiographic monitor in the emergency room using a modified V₄ lead. She developed a rapid pulse rate and a rhythm strip was recorded (Fig. 1). (The strips are continuous.)

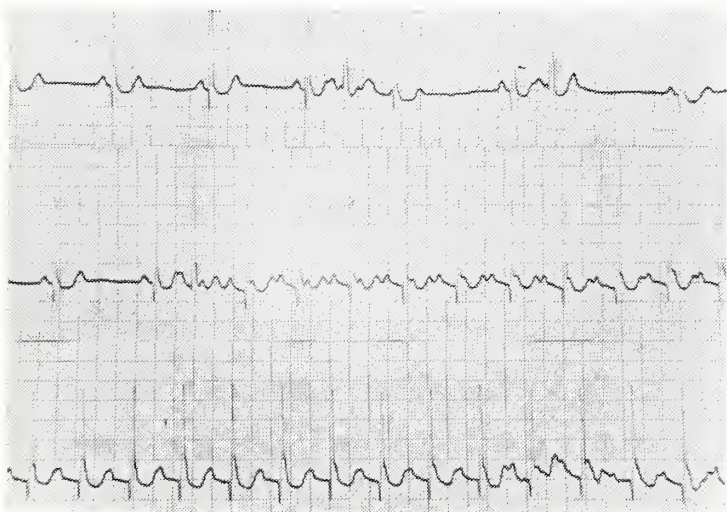


Figure 1

Discussion

The top strip shows sinus rhythm at a rate of 58 per minute. The PR interval is normal at 0.17 seconds. The fifth beat and the eighth beat in the top strip are clearly premature. P waves can be seen deforming the T wave of the antecedent beat. Note that the pause is not fully compensatory and the premature beats are not widened. These represent premature atrial contractions.

In the second strip a premature beat occurs and initiates a run of atrial tachycardia. Upright P waves are seen between the QRS complex and

T wave and are not conducted. Therefore, there is atrial tachycardia with a 2 to 1 block. The atrial rate is 210 per minute and the ventricular rate is 105 per minute. At this rate the P wave preceding the QRS complex has a PR interval of 0.20 seconds, lengthening slightly in the third strip, where the P wave is totally lost in the T wave. Note that the nonconducted P wave is also lost in the QRS complex. Toward the end of the third strip (fourth beat from righthand side) one can occasionally see the P waves emerging from the QRS complex.

This arrhythmia is occurring in the presence of digitalis intoxication with borderline hypokalemia. When the serum digitalis level later returned at 3.5 ng/ml and the potassium was 3.3 mEq/liter, the tachycardia ceased and the patient improved following administration of potassium. Digitalis was discontinued for three days and restarted at a lower dose.

Although paroxysmal atrial tachycardia with block is commonly induced by digitalis toxicity it may also occur with hypokalemia alone, with cor pulmonale, with ischemic heart disease, or occasionally with medications other than digitalis, such as quinidine or isoproterenol. It is more common in patients who have had severe impairment of left ventricular function.¹ Commonly, potassium depletion will precipitate this rhythm in the appropriate setting,² and it has been observed that patients with paroxysmal atrial tachycardia with block not associated with digitalis toxicity may respond to treatment with digitalis.³

The differential diagnosis of this arrhythmia may include sinus tachycardia, paroxysmal atrial tachycardia of the common type, junctional tachycardia and atrial flutter. Junctional tachycardia may be suggested when P waves are not discernable or when they are conducted retrogradely from the AV junction and are inverted in leads 2, 3 and AVF. On occasion P waves in paroxysmal atrial tachycardia may be difficult to identify and the use of varying chest leads or an esophageal lead may be of value. In paroxysmal atrial tachycardia of the common type the heart rate usually exceeds 140 per minute and

Continued on page 202

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Angiotensin-Converting Enzyme Inhibition: A New Medical Therapy for Hypertension?

LAURENT FAVRE, M.D.; JOHN W. HOLLIFIELD, M.D.; and DORIS N. McKINSTRY, M.D.

A large number of antihypertensive agents are available for the medical treatment of hypertension. Nonetheless most physicians agree that the relative high incidence of side effects encountered during antihypertensive treatment and the lack of specificity of the drugs available limit their ability to treat many hypertensive patients.

In the majority of patients with hypertension, the etiology of blood pressure elevation is uncertain and it is difficult to apply a specific treatment to a multifactorial disorder. Therefore, investigators have attempted to subdivide patients with so-called essential hypertension into categories, which has simplified therapy and suggests factors which play the most important role in the cause of the blood pressure elevation. This approach to essential hypertension lead to renin categorization and the identification of a group of hypertensive patients with high renin values whose blood pressure responded favorably to the renin-lowering agent propranolol. Propranolol, however, has been shown also to lower blood pressure by a renin independent mechanism in low renin hypertension.

Other more specific compounds which affect the renin-angiotensin cascade have developed as therapeutic and diagnostic tools. One of these is saralasin, an analogue of angiotensin II, the active component of the renin-angiotensin system. This agent has gained use as an effective tool in recognizing renin mediated forms of hypertension.

Chemicals which inhibit angiotensin-converting enzyme (ACE), which is responsible for the activation of angiotensin I (AI) to angiotensin II (AII),¹ are other medications which inhibit the renin-angiotensin system, such as several small

peptides isolated from snake venom, for example. These agents reduce the pressor activity of angiotensin I but not angiotensin II when infused in man and acutely lower the blood pressure in patients with renovascular hypertension, malignant hypertension and normal or high renin essential hypertension. As these polypeptides are active only intravenously they are not generally useful. SQ 14,225 (2-D-methyl-3-mercaptopropanoyl-L-proline)² was reported to be effective after oral administration in experimental animals and in normal volunteers,³ and extensive toxicology studies of this small derivate of proline have failed to demonstrate major toxicity in animals.

At Vanderbilt we have had the opportunity to study 12 hypertensive patients during short-term and long-term administration of SQ 14,225 (provided by Squibb Laboratories, Princeton, N.J. in the past six months. Four patients had renovascular hypertension and eight had essential hypertension (four with low renin, three with normal renin and one with high renin status). We measured the blood pressure (BP) and determined plasma renin activity (PRA), plasma AI and AII, aldosterone (A) concentrations, and serum ACE activity during a placebo period followed by a dose-ranging and a dose-maintenance period as long as eight weeks.

SQ 14,225 induced acutely an almost complete inhibition of ACE from 30 to 90 minutes after ingestion. During long-term therapy with doses ranging from 25 to 250 mg qid, serum ACE was maintained at low levels. BP fell slightly in most patients after a single dose although there was no correlation with the fall of ACE. After a few days of treatment the reduction in BP was even more marked in seven patients whereas five other patients required diuretic therapy to obtain adequate control of their BP. The most impressive

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TABLE 1
EFFECT OF SQ 14,225 ON NORMAL RENIN ESSENTIAL HYPERTENSION

Time	PRA (ng/ml/h)	AI (pg/ml)	AII (pg/ml)	A (ng/dl)	ACE (ng/ml/min)	BP (mmHg)
Before SQ 14,225	2.3	180	20	12.0	116	160/84
After 90 min	4.2	1540	25	3.7	13	110/70
After 180 min	9.1	1720	15	3.5	18	130/60

BP response to ACE inhibitor was observed in two patients with renovascular hypertension and in four patients with essential hypertension belonging to three different renin classes. These favorable results were maintained during the long-term phase of therapy. As expected ACE inhibition provoked a decrease of plasma AII and aldosterone, while PRA and circulating AI were increased dramatically.

With the exception of one patient who developed a mild rash and fever which rapidly reversed after stopping the drug, all patients tolerated this new form of therapy quite well. In many cases it replaced three or four drugs necessary to affect blood pressure control. The BP and hormonal changes noted in a patient with normal renin essential hypertension after a single dose of 25 mg SQ 14,225 are shown in Table 1.

The mechanism of action of SQ 14,225 is probably not related just to the inhibition of angiotensin conversion. We failed to observe a correlation between the BP response of the patient, his renin profile and the variation of

ACE, AII or aldosterone concentration. The pharmacologic effect is made more complex by the fact that the same converting enzyme prevents the degradation of bradykinin, which is a potent vasodilator. Therefore if SQ 14,225 is concomitantly able to activate bradykinin and to inactivate AII, this may explain its antihypertensive activity in all categories of essential hypertension. In brief, this orally active ACE inhibitor offers interesting properties which could open a new way for the medical management of hypertension. Our group and others will try in the near future to define the place of this drug in the antihypertensive armamentarium and the eventual influence it exerts upon the hormonal regulation of blood pressure.

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EKG OF THE MONTH

Continued from page 200

block is not present. In sinus tachycardia in this age group it is unusual for the atrial rate to be in excess of 150 per minute. With atrial flutter the atrial rate will commonly exceed 250 per minute, although on occasion it may be as slow as 200 per minute. In atrial flutter the usual "saw tooth" undulating baseline is present, a pattern not observed in this tracing.

Final diagnosis: (1) Premature atrial contrac-

tions. (2) Paroxysmal atrial tachycardia with 2 to 1 block. (3) Digitalis toxicity.

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Programs for the Handicapped: Philosophy, Mandates and Variety

JAMES G. FOSHEE, PH.D.

Deinstitutionalization, normalization, least restrictive alternative, community-based programs, individual education plan, free appropriate public education, zero reject model, individual habilitation plan, due process, advocacy . . . All these words and phrases are now in frequent use; they state in a succinct way that people are looking differently today than they did just a few years ago at the needs of persons with handicaps. The words and phrases convey an attitude about the rights of handicapped individuals to live under as normal circumstances as possible, to have as little restrictions on their personal liberty as is feasible with whatever limitations their handicap may impose, and to have equality of opportunities with all other citizens. The words and phrases convey a belief that without their consent or that of their advocate, individuals must not be housed or "schooled" in facilities or programs which are isolated from nonhandicapped individuals unless due process is followed and unless such isolation is judged to be in their best interest.

The first choice for housing, schooling and appropriate programming for the individuals is that all should be provided as near their home and community as possible. When handicapped children are identified, free and appropriate public education must be provided them (a "zero reject" model) and there must be an individualized educational plan with specified components in the plan for each child. Similarly, if an adult with mental retardation is to be confined to an institution there must be an individualized habilitation plan with specified components for each adult.

One of the most misunderstood terms of the group of words and phrases is the term "deinsti-

tutionalized." Some view the term to mean only that institutionalized people are moved from institutions to communities—"dumped," in other words. I see it as having a much broader meaning. For me, the term encompasses the underlying philosophies embodied in the succeeding words and phrases. In fact, I see deinstitutionalization as implying appropriateness and variety of treatment and training alternatives, ranging from handicapped individuals living in their own homes to their living in institutions. It implies that there is no one answer to meeting the needs of handicapped persons, but rather that there are numerous answers. More specifically, I see the term as meaning:

1. The prevention of institutionalization. Preventing institutionalization requires that there be appropriate treatment and training facilities and programs in local communities. I see the role of the Department of Mental Health and Mental Retardation as that of assisting in the development of such facilities and programs. Institutionalization is not ruled out when appropriate. In most cases, however, institutionalization is not the appropriate action. To institutionalize most persons with mental retardation, for example, would be essentially impossible and enormously expensive. Moreover, such action would be analogous to hospitalizing all persons with infected fingers without regard to the extent and severity of the infection—a gross and fatuous waste of scarce resources.

2. The return of appropriately prepared individuals from institutions to appropriate community settings. This aspect of deinstitutionalization means that appropriate, but not perfect, returns to the community are made.

3. The establishment or assistance in the establishment of responsive residential and program settings for those handicapped persons returning from institutions or for those handicapped persons

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who are being prevented from institutionalization. If appropriate supporting services do not exist, this means the Department should assist in their development.

Even if one did not subscribe to the deinstitutionalization philosophy and even though the implementation of the philosophy gives some segments of our society much concern, legislation and judicial decisions appear to have established that provisions for meeting the needs of persons with handicaps must be offered in the setting which is most appropriate and least restrictive of their liberty. For example, Public Law 94-142 (1975) and Section 504 of the Vocational Rehabilitation Acts of 1973 indicate that special educational services appropriate to the needs of all handicapped children must be provided. The regulations for Section 504 stipulate that "if placement in a public or private residential program is necessary to provide a free appropriate public education to a handicapped person because of his or her handicap, the program including nonmedical care and room and board shall be provided at no cost to the person or his or her parent or guardian." Requirements that the service be delivered in the least restrictive setting possible are contained in Public Law 94-103.

Tennessee's *Saville vs Treadway* (M.D. Ten-

nessee, March 8, 1974) prohibits the inappropriate placement of persons with mental retardation in developmental centers. A board, independent of the Department, makes the final decision as to whether a person is appropriately admitted to the center. Due process is required.

Most of the residents of our developmental centers are eligible for Medicaid. To qualify for Medicaid reimbursement, we are required to have a plan for removing persons from the developmental centers when their placement there is no longer appropriate.

The point I am attempting to make is that in roughly the last ten years there has been a real "turn around" in the concept of service to the handicapped. Formerly, there was preponderantly one answer for all persons with mental retardation: institutionalize them. The one answer was never sufficient; it is not sufficient now. Several alternatives are needed, including institutions (U. S. District Judge Raymond Broderick recently ruled in Philadelphia that segregation of the mentally retarded in institutions violates the equal protection clause of the 14th Amendment to the U.S. Constitution). We are attempting to assist in providing the needed alternatives. Obviously, there are still many gaps and problems, but we are progressing.



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Senator Edward M. Kennedy's Address To the AMA National Leadership Conference

I am delighted to have this opportunity to address the Leadership Conference of the American Medical Association.

My family, more than most families, has come to know, to depend on, and to respect the practicing doctor. If you had seen my son Teddy climbing the Great Wall in China earlier this month, you would know what I mean when I say a prayer of gratitude each day for the miracles of modern American medicine.

As a son, as a parent, as an occasional patient myself, I have seen firsthand the skills and achievements, as well as the compassion, of the American physician. That is why I expect so much from you. That is also why I am counting on you to take a constructive leadership role in solving some of the serious problems that currently trouble the American health care system—problems of rising costs, specialty and geographic maldistribution of physicians, uneven quality of care, and exploding technological advances. Often, these advances outstrip our ability to understand not only their appropriate use, but also their ethical implications.

We cannot solve these problems without your help. No federally enacted solution can be successful if it is resisted by the overwhelming majority of practicing physicians or if it discourages young people from seeking a career in medicine.

On the other hand, the current problems are so large in scope and affect so many elements of society that they cannot be solved by physicians alone. Consumers, economists, insurers, health care administrators, research workers, other health care professionals, medical sociologists, ethicists—and all levels of government—have a stake in the solution of these problems. Each

group has a constructive role to play. We are all in the same boat, and our problems will not be solved unless we all start rowing in the same direction.

The challenge is to make solutions emerge from discussions and debates among all these groups. Part of that challenge is for each group to be candid with the others, to be pragmatic, to listen and to learn. That is the spirit in which I come here today, the spirit in which I deliver these remarks.

It is hard for my generation in this country, people who have lived with the achievements of modern medicine virtually since we were born, to realize that medicine as it is practiced today is a relatively new profession. It was not until the turn of the century that, as Dr. Lawrence Henderson of Harvard put it, “A random patient with a random disease, consulting a doctor chosen at random, stood better than a 50-50 chance of benefiting from the encounter.”

At that time, medicine was already well developed as an art, but it was in its infancy as a science. The pharmaceutical industry was just beginning. Infectious diseases ravaged our population. Today, by contrast, there are over 25,000 marketed prescription drugs. We have drugs to treat diseases today that were unknown and unrecognized only a few years ago.

The medical devices industry was virtually nonexistent at the turn of the century. Today, it has become so complex and sophisticated that we have had to enact new regulatory legislation to protect the consumer. And that medical devices legislation was enacted with the strong support of the medical devices industry.

Our knowledge of disease has increased exponentially. We have come to recognize new categories of disease. The American lifestyle has allowed some diseases to grow to epidemic proportions in our population in modern times. We

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Senator Kennedy is chairman of the Senate Subcommittee on Health and Scientific Research.

have also virtually eliminated diseases, such as polio, which once occupied a great deal of physician time.

If the world is a vastly different place to live in today compared to 1900, it is also a vastly different place to practice medicine. New knowledge and new technology continue to be developed at a pace too rapid to be comfortably assimilated. These and other changes oblige us to reexamine what it means to be a physician and what it means to be a patient. They require us to reevaluate what the health care system means to society. Let me share with you, therefore, my view of what this rapidly changing medical world, with its mushrooming knowledge and technology, means for physicians, patients, and society.

For the physician, there are more things to know than ever before. It is harder to keep current. There are new treatments, and new problems with old treatments. The gospel you know today may be different or discredited tomorrow. Long-accepted standards for treating a certain illness may be suddenly reversed.

Increasing specialization has been one attempt to slice the pie into manageable pieces. But it has not solved the problem, because the size of each piece has now become even larger than the original pie. The practicing specialist finds it just as hard to keep up as the general internist.

And this degree of specialization has created a second problem—the relative shortage of primary care physicians. Clearly, we need both specialists and general practitioners. How we strike that balance will be an important measure of our success in meeting the genuine health needs of our population in the future.

But whether a physician is a specialist or a general practitioner, the same question must be asked: How do we resolve the central and growing dilemma of modern medicine—the unfettered discretion of individual practitioners to use their own individual judgment, without meaningful accountability, in the treatment of individual patients?

I believe in the doctor-patient relationship. Certainly, government does not belong at the bedside. And neither does the malpractice lawyer.

But the doctor brings special obligations and responsibilities to that relationship—to be up to date on medical knowledge, to know the range of alternatives, to be competent in administering drugs and in using medical devices.

For example:

—Is one-time licensing sufficient to allow a physician a lifetime of accreditation? Was the standard of licensing in 1938 sufficient to qualify a person to practice medicine in 1978?

—Should the receipt of a license to practice medicine confer on a physician the freedom to use any medical device in his practice, regardless of the complexity of the device? Or should he have to demonstrate his ability to use it in this connection? I am deeply concerned over recent reports of medical salesmen assisting in complex surgical operations.

—Should an individual practitioner be allowed to use a marketed drug for any purpose? Is every doctor qualified to prescribe every drug, or to substitute his personal judgment for documented scientific studies?

—Should every doctor be allowed to treat every disease, regardless of his familiarity with it?

I believe the time has come to find more responsible answers to questions like these. This is not governmental intrusion into the physician's office. No one should tell an individual physician what to do for an individual patient. But the boundaries within which medicine is practiced should be more clearly defined. I believe we can reach this goal in the following ways:

First, we should require relicensing of all physicians periodically.

Second, we should require, in addition, a certain number of hours of continuing education in order to qualify for relicensing.

Third, we should restructure the current peer review system in various ways. There must be a more prominent role for nonphysicians. There should be periodic reviews of drug utilization and of hospitalization decisions and management. In some cases, there should be pre-admission reviews. And there should be mandatory second opinions for certain types of surgery. In all of these dimensions, peer review should be carried out in a constructive manner. The objective to be achieved is greater education, not more oppressive regulation.

Fourth, we should establish a national commission to study the norms of medical practice in the United States. The goal of this group should be to provide, for the first time in the history of modern medicine, a broad survey and comparative analysis of the actual practice of medicine. We should be able to learn whether patients with certain diseases fare better in the

hands of a specific kind of doctor or a specific region of the country.

How much difference does it make to a patient if a surgeon operates three times a day versus three times a month?

These data should be made public and distributed widely. There are profound ethical dimensions to such questions. What if it turns out that the chances for survival with a certain disease are 100% higher if treated by a certain specialty? What if it turns out that certain specialists, at higher prices, do no better in treating certain diseases than family doctors?

I also plan to introduce legislation in the Senate next week to create a research unit to study and evaluate new technologies as they are developed. In this way, the new procedures can more rapidly attain their appropriate standing, without widespread *overuse* or *underuse*.

In addition, I support legislative proposals to allow the Food and Drug Administration to limit the use of a particular drug, whenever a restriction is necessary to protect the public health.

The new world of medicine is also having a profound impact on consumers. As a result, the role of the patient must be as carefully redefined as the role of the physician. The need for fully informed consent is more urgent than ever. Patients have an increasing obligation and responsibility to participate in their own care. They should know when they are taking approved drugs for unapproved purposes. They should know, in university hospitals, whether the professor or the resident is performing the surgery, let alone the equipment salesman.

Patients should be encouraged to weigh the risks and benefits of alternative therapies in their own minds, and they should be encouraged to seek additional medical opinions. As consumers, they also have an important responsibility in helping to set priorities for the health care—by participating in the planning process at the local, state and federal levels.

For society as a whole, the impact of modern medicine is equally profound. For the first time, we are asking ourselves whether the nation can afford health care as medicine is practiced today. We are trying to develop effective ways by which costs can be controlled. We are trying to set national priorities for the types of doctors to be trained and for the allocation of sophisticated and increasingly expensive resources. Most important, having acknowledged that the cost of the current system is exorbitant, we are trying

to develop national health insurance proposals to restore the balance and stability we have lost.

In each of these critical areas, the American Medical Association has played a central and long-standing role. But the AMA's record is mixed at best.

Historically, you have a proud tradition. In the 19th century, you were the pioneers. You urged the states to license physicians in order to assure the quality of care. You urged the states to do many other things as well: to label all poisons clearly and distinctly; to take the treatment of the mentally ill out of the prisons; to require boards of health be established in each state; and to warn against the pollution of the lakes and rivers of the nation.

In the first half of this century, you were still in the vanguard. You recommended the creation of the Federal Food and Drug Administration. You urged that milk be fortified with vitamin D. You publicized the hazards of some children's toys. You took the initiative to control the abuse of barbiturates.

But in recent times, your record has been less positive. I have been consistently disappointed by the appearances of your representatives at our Senate hearings. I have felt, until very recently, that you were playing the role of nay-sayers, opposing proposal after proposal without offering constructive alternatives.

I do believe, however, that things are beginning to change.

Your National Commission on the Cost of Medical Care has produced a thoughtful and constructive report. I hope you will endorse it.

—I am particularly hopeful that you will endorse those sections which support the role of HMOs as a legitimate alternative to fee-for-service medicine.

—The proposed regional physician and hospital directory can be a vitally important new source of information for consumers. It will list prices for well-defined procedures, the length of time required for appointments, the willingness to accept new patients, the institutional affiliations, and the board certification status. In many other ways, patients will receive welcome new benefits and assistance.

—The recommendations for reimbursement restrictions, designed to reduce expenditures for inappropriate care, will significantly strengthen the quality of medicine.

—Overall, many of the recommendations of your Commission are responsive to the challenges

facing today's physicians. If the AMA recognizes these challenges, I am confident that you will also recognize the merit of many of the proposed solutions.

Specifically, the report is a welcome document for all of us who look to the AMA for greater leadership, and I am hopeful that the report will receive your official endorsement. I also commend your current efforts to withstand the massive and deeply distressing laetrile fad. The AMA's clear, public statements against laetrile will help to ensure that the product will adhere to the same standards of safety and effectiveness that all other drugs must meet.

I also welcome the AMA's continuing commitment to prevention as a primary technique in health care—particularly your strong commitment to immunization campaigns. I think I can say with some confidence that in the United States Congress, in 1978, prevention is an idea whose time has finally come.

I have come here today in part to ask your help in developing a comprehensive preventive health care package, which I intend to introduce in the Senate by spring. As now planned, the package will deal with smoking, diet, exercise, screening, and immunization. It will emphasize particular diseases, such as hypertension. It will try to recast our priorities in the way scarce health dollars are spent.

Because of the critical importance of this area, I am also asking you to join me in sponsoring a National Disease Prevention Conference designed to focus the attention of the nation on the great potential of preventive measures to reduce the toll of disease in our population. If you agree, I propose that planning for such a conference begin immediately, with a target date of this fall for the event.

I also intend to work closely with you in the development of a new initiative to improve the health care of mothers and children. We share many common views in this area, and I am confident that we can develop responsible new proposals.

Disease prevention and child health are areas where we agree and can work together effectively. But there are two major areas where we still have wide differences, and where congressional action has been held up for too long—reform of the nation's drug laws, and national health insurance.

The charter of the Food and Drug Administration requires that drugs be shown to be safe

and effective for a given purpose prior to marketing. Once the drug is marketed, however, unless an imminent hazard to public health develops, there are no holds barred. The drug lies outside the regulatory framework and may be used for any purpose. The FDA does not monitor how drugs are used, and no one else does either.

No one knows how well, or how poorly, drugs are used in the United States. No one knows the incidence of adverse drug reactions. No one knows which drugs are really most effective.

The absence of reliable drug usage data is acknowledged by everyone. Our Senate Health Subcommittee has received estimates that anywhere from 16,000 to 120,000 deaths occur each year from adverse drug reactions. Although we don't have reliable data to indicate the actual number, we do know that even 16,000 is far too many, and that 120,000 would be a scandalous national epidemic. The AMA has recognized the problem by cosponsoring the joint commission on prescription drug use. But we also need your support for pending legislation to alter FDA's mandate, so that the agency can document how drugs are actually used, and adjust its actions to fit the actual patterns by which drugs are used.

In order for the system to work—in order for adequate drug use data to be collected—the system must be devised so that the practicing physician will comply with it, and *want* to comply with it because of the obvious usefulness of the information for his practice.

If such a system can be put in place, it will have another major benefit, because it can be used to shorten the time it takes to get new drugs into physicians' hands.

This public policy issue is an obvious challenge to the AMA. In the recent past, you would have viewed it as an unwarranted intrusion into the practice of medicine. You would be at the ramparts, defending the right of the individual physician to prescribe whatever he wants, whenever he wants, for whatever disease he wants, and in whatever dosage he wants.

But this issue is a false one. The real issue is whether the FDA, which the AMA helped to create, will be required to regulate in the dark. How can a federal agency for the regulation of drugs ignore the way drugs are actually used and still carry out the mission for which the agency was created?

To me the issue is one of knowledge versus

ignorance, liberty versus license. It is important for the FDA and the individual physician to know how drugs are being used, and to know the consequences that take place.

The real challenge is to devise a fair system that preserves the proper freedom of physicians, but also generates the data needed for proper regulation of drugs by the FDA. The system now is out of control. Most physicians now have to rack their way through a jungle of conflicting and confusing combinations of scientific data and sales pitches in deciding how and when to prescribe a drug. A better system would enable the FDA to clear a path through the current jungle and give the physician the reliable information he needs as the basis for his judgment.

That is what we are striving to achieve. I want to review my proposal with you, and go over the other aspects of the drug legislation. We want our proposals to be tested against the reality of everyday practice. But we also want your recognition of the reality of the serious problem to be solved.

Finally, I would like to make a few remarks about national health insurance.

It has become fashionable in recent months to say that the tide has turned against national health insurance—that we cannot afford it, that Secretary Califano has placed it on the back burner, that the social security tax increase kills any hope of financing it, and that it is now farther from serious consideration than it has been in many years.

That simply is not true. In my view, we are closer to serious congressional consideration of national health insurance today than we have been at any time since Medicare was enacted in 1965. I have talked personally with President Carter about the issue in recent weeks. I am convinced not only of the high priority he gives to national health insurance, but also of his strong commitment to it and his deep personal belief in it.

The President's proposal for comprehensive, universal national health insurance will be ready to be introduced in Congress this summer. The Senate Health Subcommittee will begin intensive work on it at once. I am setting a goal of final action by the Senate and House three years from now, before Congress adjourns for the 1980 elections.

Our critics say that runaway health care costs rule out any early enactment of national health insurance. The federal budget could not stand the cost, they say—especially after the im-

sition of higher taxes to rescue the social security system; and the possibility of additional higher taxes to pay for the President's energy plan.

But the opposite is true. The only way to control costs, to rationalize health delivery system, and to provide effective planning for the future is as part of a national health insurance program.

National health insurance does not mean a national health service. It does not mean massive new government intrusion into private practice, or a government ear on the doctor's stethoscope. It does not mean salaried, government-employed physicians. It does not mean the AMA will become another federal agency.

It does mean some things, however. It means a more wisely regulated health care system. It means more effective cost controls, more careful planning, and more effective peer review. And it means a better health care system for both the physicians and the patients of America.

In fact, for the vast majority of physicians in the nation, national health insurance will be no more intrusive than Medicare. And for the vast majority of citizens, national health insurance will be just as beneficial as Medicare has been for the elderly.


We can reach these goals. But we can reach them only with the cooperation, the good will and the hard work of each of the partners in the system—doctors, consumers, insurers, and the elected representatives of all of you in Congress.

I know that you and I have strongly divergent views on what should be done in many of these areas. But I also believe that we can develop the kind of serious dialogue that challenges old assumptions and moves all of us to common higher ground.

It is time to begin that dialogue, time to reach out, time to begin a more productive relationship on all of the complex issues we face.

And so I come here today with an olive branch. I hasten to add that it is not a flag of surrender. But I also emphasize that it is not a banner of attack.

We will have disagreements in the months and years to come, and there will be difficult obstacles to surmount. But we have work to do, and it cannot be done unless we work together.

I look forward, therefore, to a new and more effective relationship. We may well find, to our mutual surprise and benefit, that neither one of us is quite what the other thought he was. 

AMA Pamphlet Stresses Tobacco Health Hazards

The American Medical Association is strongly against smoking. It urges those who smoke to quit, and those who don't smoke never to start.

In a revision and updating this winter of its basic pamphlet, "Smoking: Facts You Should Know," the AMA points out once again the reasons behind its stand against tobacco. The pamphlet stems from an official policy decision of the AMA House of Delegates which said:

"The American Medical Association urges its members to play a major role against cigarette smoking by personal example and by advice regarding the health hazards of smoking. The AMA discourages smoking by means of public pronouncements and educational programs, and takes a strong stand against smoking by every means at its command.

"The AMA indicated to the Congress of the United States the incongruity of the expenditure of tax dollars to promote the production and sale of tobacco, while at the same time spending other tax dollars to discourage cigarette smoking because of its hazard to health."

Some statements from the new version of the AMA pamphlet are printed, condensed, below.

Research studies strongly indicate that tobacco smoking, and particularly cigarette smoking, is associated with a shortened life expectancy. About 300,000 Americans die prematurely each year from diseases related to smoking.

Cigarette smoking is a major cause of lung cancer, emphysema, heart disease and chronic bronchitis. Tobacco smoking also is strongly associated with cancers of the larynx, mouth, esophagus and urinary bladder. Smoking is associated with an increased risk of stroke and other circulatory diseases.

In most diseases related to smoking the health hazards are directly proportional to the number of cigarettes smoked per day, the earlier the age at which smoking starts, and the number of years smoking has continued. Fortunately,

those who quit smoking begin to decrease the risk to their health as soon as they quit. The risk of heart attack and stroke is measurably decreased within one year.

Smoke, a product of burning, contains hundreds of chemical substances, including nicotine, tars and carbon monoxide. Nicotine indirectly causes the blood vessels to constrict, which in turn forces the heart to pump faster and faster, increasing the stress on the cardiovascular system.

Tars in smoke are in the form of tiny particles that settle onto the membranes of the breathing passages and delicate lung tissues. Tars contain chemicals that have produced cancer in experimental animals.

Carbon monoxide reduces the oxygen-carrying ability of the blood by driving the oxygen from red blood cells. As much as 10% of the oxygen that would normally be carried by the red cells is driven out by the carbon monoxide.

The risk of death from lung cancer is ten times greater for the average male smoker than for the nonsmoker. Fewer than 10% of those who develop primary lung cancer live more than five years.

Cigarette smoking is a major factor associated with the two principal diseases that constitute chronic obstructive pulmonary disease (COPD)—chronic bronchitis and pulmonary emphysema. These diseases can kill and also are cripples, forcing many people to retire during their most productive years. Chronic bronchitis means a chronic cough that produces sputum. Pulmonary emphysema involves destruction of the tiny air sacs in the lung, through which oxygen is absorbed into the body.

Cigarette smoking is causally related to higher death rates from heart attack, stroke and other circulatory diseases. Smoking makes the heart beat faster, raises the blood pressure, and narrows the blood vessels of the skin. Nicotine

makes the heart contract more strongly and more often. Some of the same mechanisms that increase the risk of heart attack also increase danger of stroke among cigarette smokers.

Why do people smoke? That smoking is related to psychological and social situations is well known, not only in the reasons people give for smoking, but also for other reasons that are not well understood. Young people often start smoking in imitation of older people. Adolescents want to be accepted by their friends and peers. Smoking may be part of the attempt to behave like one's friends and thereby gain their acceptance.

Some authorities suggest that a cigarette represents a reward that a smoker can offer himself whenever he wishes, or that the act of smoking represents a means of self-expression. Some people may smoke because of the need for oral activity to fulfill an unsatisfied sucking reflex.

Women as well as men are affected. Women who are heavy smokers are five times as likely to die from lung cancer as nonsmoking women. Females who smoke have more illness each year and are more likely to suffer from heart disease, bronchitis and emphysema. Women who smoke during pregnancy increase the risk of having stillborn infants or babies who die soon after birth.

Quitting smoking can be a difficult task. Each person must find the way to quit that suits his or her particular needs. If one way doesn't work, try another. Over 30 million Americans have found a successful way to quit smoking. Some quit "cold turkey" and never start again. Others succeed through behaviorally oriented clinics.

The decision to quit smoking is a personal one. Many people quit because they wish to get rid of the effects cigarettes have already had on them (like a chronic cough) or to prevent future health problems. Others quit to set an example for their children, or because they can think of better ways to spend their money.

Smokers may claim a right to pursue their habit, but nonsmokers have at least as much right to clean air, especially in confined places like airplanes, meeting rooms and restaurants. A person doesn't have to be a smoker himself to suffer ill effects from cigarettes. A nonsmoker in the company of a smoker breathes in smoke from the burning end of the cigarette as well as the exhaled smoke. Some people are allergic to tobacco smoke and may suffer smoke-caused asthma attacks.

If smoking is a personal right, it carries with it the responsibility of respecting the rights of the nonsmoker, too.

AMA News Release

**IF CANCER HAS TOUCHED YOU—
call us, your American Cancer Society**

This free brochure, labeled as above, describes services offered by the American Cancer Society to cancer patients. These services include loan and gift items, drugs, certain medications, information and counseling, transportation to treatment centers (available in many areas) and many rehabilitation programs, including reach to recovery for breast cancer patients and services for laryngectomy patients and ostomy patients.

This brochure is available for distribution through physicians' offices and waiting rooms. Write: American Cancer Society, Tennessee Division, Inc., 2519 White Ave., Nashville, TN 37204.

Immunizations—Whose Responsibility?

WALTON W. HARRISON, M.D.

In our enthusiasm for the diagnosis and treatment of illness, we physicians often overlook the promotion of "wellness." And yet medical care has about reached its limit in improving the health of society. Preventive health care must begin to take precedence over the treatment of disease. But all too often we fail to employ one of the simplest, least expensive, and most effective disease preventive measures at our disposal: active immunizations.

Often we leave it to the department of education to require the children to be immunized before attending school. This leaves a sizable population of preschoolers at risk, allowing for minor epidemics of whooping cough here and there, and produces the threat of larger epidemics of diphtheria, polio and measles. And we have left it to the county health departments to administer the vaccines, thus fragmenting the care and responsibility for children's health.

The recommendation that adults be given a tetanus-diphtheria booster every ten years has been all but ignored by most physicians. Except for a tetanus shot after injury, and for immunizations given to military personnel, I suspect over 95% of our adult population is inadequately immunized. As diphtheria is now exceedingly rare, we can no longer assume that the adults

will retain their immunity by continued exposure to the organism. We have then created a potential for a nationwide diphtheria epidemic, and we may again see older people with lockjaw from minor injuries.

Clearly, it is the medical-ethical responsibility of every primary health care physician to see to it that his patients have optimal protection from disease. With the present direction of medical liability judgments, a physician may soon also have a medicolegal responsibility for either recommending or administering active immunizations to patients under his care.

Unless all "people doctors," whether primary physician or consultant, check the immunization status of their patients and direct the administration of whatever is needed, there will continue to be unnecessary deaths and the ever-present threat of epidemics.

Every patient deserves the best possible medical care from his physician. Protection from disease by active immunizations is an essential ingredient. Failure to keep all patients adequately immunized is inconsistent with optimal medical practice. An active immunization program is an integral and necessary part of the continuing doctor-patient relationship with ethical and medicolegal responsibilities.

Dr. Harrison is chairman, Tennessee Chapter, American Academy of Pediatrics.

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The imperatives of drug-law revision

DONALD KENNEDY, PH.D.

Drug-law revision is plainly "an idea whose time has come." Although the present system of drug regulation has served us well, it is by no means the best that can be devised. Over the years a number of deficiencies have emerged—some minor, some of basic importance. Many of these deficiencies have been brought to our attention by the medical community, others we have isolated ourselves; still others have gained the attention of Congress or of informed critics of the way FDA operates. Recommendations for improving the regulatory system made by the HEW Review Panel on New Drug Regulations, by FDA to the administration and in congressional testimony, and through various congressional initiatives seem sure to coalesce into basic reform.

As we embark upon that reform process, we must remember that consumer safety protection amounts to much more than preventing the occurrence of harm. Consumers are poorly served when they are denied access to products that may help them by relieving pain or suffering, or by curing a disease or ailment. So the challenge is to strike an appropriate balance between the benefits and risks associated with a given drug before we decide whether it is to be marketed. Inextricably tied to this decision is what we are able to do *after* this initial determination is made, in the event that our judgment or the science on which it is based turns out to be faulty. Although the current provisions governing the testing and marketing of drugs are among the most advanced in the world, it is generally recognized that further refinements and improvements are not only possible but desirable.

Dr. Kennedy is Commissioner, Food and Drug Administration, Department of Health, Education, and Welfare.

Reproduced with permission from *Pharmaceutical Technology* (2:10-11, 1978).

A new drug law should be based on a coherent and rational regulatory philosophy that relies on good science and medicine. It should be logically organized and clearly written. Individual sections should interrelate with other sections and with the statute as a whole.

Three principles guiding our own deliberations are (1) all drugs for human use should be regulated according to the same standards and rules; (2) particular requirements imposed upon one group of drugs but not upon another should derive from differences between the groups that logically and directly relate to consumer and patient protection; and (3) because science is dynamic, the regulatory system and individual regulatory decisions must be capable of prompt and orderly change.

What are the areas where reforms are most obviously needed? The answer is that reforms are required at both ends of the process. At the beginning of the drug development process, we must have greater flexibility in the clinical testing and marketing of drug products, particularly those entities that may represent significant or urgently sought therapeutic breakthroughs. At the other end of the process, we must have the ability to keep the use of particular marketed drugs under strict controls and to summarily halt their use where necessary if toxicity or adverse reactions appear. In the middle, drug testing and marketing should be a more integrated and gradual process than it is today. An ideal regulatory system, in our view, must permit a new drug to be used by an increasingly larger number of patients in decreasingly sophisticated medical settings—beginning with the research scientist in the laboratory and moving toward the domain of the family physician in the community.

I believe it is also essential that the law clearly articulate the two key standards for making de-

cisions concerning drugs—those related to safety and efficacy—in a way that is clearly understood by our whole society. It must be conveyed that no drug is safe in the absolute sense and that not every drug is efficacious in all applications. Some drugs, such as amphetamines, are useful for very limited clinical indications but are outrageously dangerous and damaging for certain individuals. They therefore constitute widespread risks to society. No drug should be permitted on the market unless it can be proved by rigorous experiment to alter the course of some ailment or disease; that is, it must be effective.

Once we answer that threshold question in the affirmative, we then must judge its risks and benefits and ask whether the benefits justify the risks to the individual and to society. This benefit-risk determination should be an explicit feature of any statutory revision. Thereafter, we must have the flexibility to guarantee distribution and use, in accordance with sound medical and scientific judgment, for the indicated conditions—without stationing ourselves as policemen in every prescriber's office or community pharmacy.

Obviously, one would be willing to accept greater risks (adverse reactions, toxic consequences) from a drug that promised to arrest or cure a serious disease for which acceptable alternative therapy was lacking. Risk-benefit judgments of this kind must be made, but they are specific to a particular clinical application. There would be justifiable outrage if a high-risk drug approved for cancer chemotherapy were regularly prescribed for headaches—even the kind of headaches FDA commissioners have. But the present laws are silent on the question of drug use outside the labeled indications.

An uninitiated reviewer of the present act—a new commissioner, for example—finds it a complicated statute decorated with explicit and implicit exceptions, often embellished by judicial wisdom. We have a bewildering array of legal chemical entities—new drugs, antibiotics, old drugs, grandfathered drugs, and others. This medicolegal smorgasbord makes neither regulatory sense nor health sense. In the first place, I am not convinced that lawyers always understand precisely when and under what conditions a drug is to be placed in any given pigeonhole, although they clearly appreciate the consequences of these different options. But more basically, there are the matters of logic and of fair dealing with consumers. There is no reason that the standards for drug approval, continuing marketing or

withdrawal should vary by historical accident; the time or circumstances of introduction to the market say nothing of interest to us as health consumers. There may be legitimate reasons for treating some drug entities differently from others; but these distinctions ought to be based upon objective criteria, developed from real data and relevant to the basic issues of benefit, risk, labeling, and conditions of marketing.

History tells us that major revisions of the drug laws of the nation occur only infrequently, so the administration wants very much to craft a revision that can take us into the 21st century. This task is so complex that even those in FDA who can devote full time to it find it a little overwhelming. But nothing less than a comprehensive rewrite will suffice; more patchwork efforts to make 1938 concepts fit contemporary science and a modern health-care system will only further amplify the inconsistencies and contradictions that now encumber our work.

The proposals we are developing were announced in mid-October by Secretary Califano; they address several major issues. We generally agree, for example, that FDA must have the authority to make proper risk-benefit determinations not only in the initial approval for marketing, but also at any time new information dictates that an approved drug should be reconsidered.

FDA's ability to get information about drugs diminishes sharply once marketing begins. We believe that authority to require postmarketing studies, to place restrictions on distribution of drugs after marketing, and to establish a good system of postmarketing surveillance are fundamental if we are to assure a safe, effective, properly labeled drug supply and if FDA is to approve some drugs that might otherwise be withheld from the market.

Under current law, drugs must be labeled for safe and effective use. With few exceptions, labeling for prescription drugs, which cannot be safely and effectively used without the guidance of a physician, has been directed not to patients but solely to physicians. It has been left to the physician to advise the patient about the drug and provide such information as directions for use, cautions against misuse, and warnings about possible adverse reactions. We have come to recognize, however, that such information is sometimes not provided by busy physicians. When provided, it is ordinarily provided verbally and is thus subject to misinterpretation and inadequate recall by the patient. For these reasons,

we now require that certain drugs—e.g., oral contraceptives and estrogens—contain a patient package insert, and we are studying the use of such inserts for other classes of prescription drugs. We would support legislation to explicitly affirm FDA's authority to require patient package inserts for many more drugs, but that authority should not be limited to drugs that have not completed the drug approval process.

I am also deeply and personally interested in attracting to the agency the best scientific talent that can be obtained for government service, as well as in improving the conditions for the many dedicated scientists we have now.

Although adequate and consistent legal authority is essential if FDA is to fulfill its responsi-

bilities for protection of the public health, no less essential is the building of a science environment and capability that gives full support to FDA's regulatory and decision-making activities. This means the following: facilities that are up to date and ideally located for the performance of their missions; improved in-service training opportunities, exchange programs with scientific and clinical centers both inside and outside of government and opportunities for FDA scientists to pursue independent research; and an environment that will help FDA to retain the experienced and dedicated scientists now on our staff and to attract additional qualified scientists into our service.



NEWSPAPER COLOR SECTIONS SAID HIGH IN LEAD CONTENT

Don't burn the Sunday newspaper magazine section with its bright color pages in your fireplace. And by all means do not use the color pages to start the charcoal in your cooking grill. Those color pages are loaded with lead.

This is an admonition in the Jan. 9 *Journal of the American Medical Association*.

In the fireplace most of the lead would go up the chimney, polluting the neighborhood atmosphere. If many homes on the block were burning the Sunday color pages, the lead content of the air would rise considerably.

Starting a grill with black-and-white newspapers won't bother you, but burning color newspapers is taboo. The lead could go directly into the hamburgers.

Colored inks with the highest lead content are, in descending order, yellow, red, green, and blue. There is little lead in black printer's ink.

Ward Duel, MPH
AMA Department of Environmental,
Public and Occupational Health

APRIL 1978						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
			TMA 143RD ANNUAL MEETING Hyatt Regency Hotel - Knoxville			
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	NOTES					

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BRIEF SUMMARY OF PRESCRIBING INFORMATION

ANTIMINTH® (pyrantel pamoate)

ORAL SUSPENSION

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 µg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions: Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

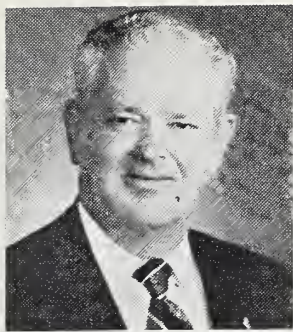
Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth Oral Suspension is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

More detailed professional information available on request.

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DAVID H. TURNER

President's page

Tennessee Physicians Protective Association

A few months ago, you received a letter from the Tennessee Physicians Protective Association, a non-profit organization, seeking your membership and support.

The association was organized for the purpose of assisting physicians in protecting themselves against frivolous lawsuits.

Since December 1, 1977, a proposal has been circulating within the U. S. Justice Department, and to some public interest law groups, over the signature of Daniel J. Meador, assistant attorney general for improvements in the administration of justice, which would recoup attorneys' fees for frivolous suits. The controversial draft memo wants to accomplish two things: "encourage private enforcement of laws enacted for the general welfare," and "discourage the misuse or abuse of the judicial system."

Toward these ends the proposal would make it possible for a private party to be awarded a fee if he prevailed in "substantial measure" as a plaintiff or defendant, and if he acted in the public interest, or his opponent acted frivolously or in bad faith. . . .¹

The vast majority of medical malpractice claims have no merit. They are a product of the suit-conscious society of which we are members. The public avidly pursues these claims, spurred on by a growing recognition of their rights and capabilities of seeking reimbursement for health care services *that they feel* were poorly provided. "That they feel"—these are the key words—that subjective element of individual perception that can so easily be influenced. The problem, in great measure, results from a growing misconception by patients of what modern medicine can do, plus a lack of personal identity and rapport with the physician, due to the increasing complexity of medical practice. Most frivolous suits, on close inspection, are easily understood and wholly preventable. More specifically, they have as their foundation any one or a combination of three factors: a poor relationship with the provider (physician), a poor result, and a bill deemed by the patient to be excessive. Each of these factors arises from a lack of understanding and unrealistic patient expectation.²

Present plans call for the Tennessee Physicians Protective Association to attempt to educate the public to the fact that such suits add to the cost of medical care and to educate the physician on how to defend himself against frivolous lawsuits.

Upon request, and subject to the approval of the TPPA Board of Directors, the TPPA will reimburse members on a pro rata basis at the end of each year for expenses incurred in connection with countersuits against persons who have brought frivolous or oppressive malpractice lawsuits against such members; also, upon request, and subject to approval of the TPPA Board of Directors, the TPPA will take action for the protection of the rights of a member or members as may be appropriate under existing circumstances.

I hope that each of you has already joined the TPPA, but if not, I would strongly urge that you favorably consider doing so. The first year's dues are twenty-five dollars. I believe that this organization can have a beneficial effect in preventing frivolous lawsuits.

Sincerely,

David H. Turner, M.D.

PRESIDENT

1. *Malpractice Lifeline*, vol. 3, no. 2, Jan. 23, 1978, p. 2.

2. Vaccarino, JM: Malpractice, the problem in perspective. *JAMA* 238:861-863, 1977.

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MARCH, 1978

they ceased writing professional liability insurance in Tennessee and elsewhere, so that in order to obtain coverage the insurance commission required all carriers writing general insurance in Tennessee to form a pool from which professional liability coverage could be obtained. It was inordinately expensive, and, responding to the will of its constituents, the profession itself formed its own company.

Coverage by SVMIC is expensive, but it is assured. In writing about the company's formation, I predicted that when the malpractice climate was improved through various legislative mechanisms, commercial carriers would again begin writing professional liability policies, underselling SVMIC with "loss leaders," and that if that happened, unless the profession supported its own company, SVMIC would likely go out of existence. The first part of that prediction has come about.

I must point out to you very clearly the necessity for supporting your own company. I understand the financial attraction of the commercial insurance that is now being written. The companies writing that insurance are not required to base their rates on their experience in Tennessee, but on their nationwide experience. Neither are they required to continue policies in force or to renew. They are stock companies, required by their stockholders to make money. SVMIC is required by its charter to base its rates on its own experience, and, unless it becomes bankrupt, to continue its policies in force.

Unless you support your own company, it must cease to exist. If it does, you will be at the mercy of the commercial carriers. Because doctors are people, and people have short memories, I felt I should remind you just how kind and tender experience has shown that mercy to be.

J.B.T.

editorials

Professional Liability and the SVMIC

Just two years ago I responded editorially to an irate TMA member who had taken me to task for not having pressed for action in getting the State Volunteer Mutual Insurance Company (SVMIC) off the ground. (In fact, I had. He had just missed it.) The point is, though, that when the malpractice litigation experience of the various commercial carriers became intolerable,

On Regulation and the Bureaucracy

God put His newly created man into His newly created world and said, "Run it." God gave Adam one simple instruction: "Do not eat of the fruit of the tree in the center of the garden." Adam blew it.

Ever since then man has been regulated, more or less, and he has continued to rebel, which is the story of man and his governments. Throughout history there have been the few who have believed the many to be incapable of governing themselves, resulting in governments which ranged

from benevolent dictatorships and monarchies to tyrannies of the worst sort. The eventual result has always been rebellion, eventuating in democracies, republics, or anarchy. Anarchy quickly leads to reestablishment of despotism, such as occurred, for example, in post-World War I Russia. Democracies do the same, only more slowly, though there have been few true democracies.

Contrary to popular dogma, the United States is not and never was a democracy. It is a republic, the main characteristic of which is a representative form of government. It was an experiment. Would it (will it) eventually follow the course of anarchies and democracies, and return to despotism?

Our society with its technology has become extremely complex, and progressively less of our total body of knowledge can be comprehended by any single individual. No legislator can read and understand all the bills presented to the Congress. He employs experts who advise him, and he pays heed to his constituents, much of whose input comes to him through lobbyists, themselves experts. He is usually caught between two pressure groups, and relies on his advisors. In the same way, his bills are written by his staff of experts, and all the regulations implementing the bills are written by "experts" in the various departments in Washington—the bureaucracy. The bureaucrats frequently follow their own heads in these matters, and may write regulations which even controvert the purpose of the act itself. These experts are career bureaucrats, who usually do not change with administrations, as their superiors do. There is literally no way to turn them out, as most are civil servants. If we are to be realistic, we must recognize that we are governed in fact by a bureaucracy, who write the bills, advise the Congress, and write the regulations.

In this issue we carry major policy statements of two of the men in Washington who most affect our own endeavors, who are most intimately involved in their regulation: Senator Edward Kennedy of Massachusetts, Chairman of the Subcommittee on Health and Scientific Research, and Donald Kennedy, Ph.D. (no relation to the Senator), Commissioner of the Food and Drug Administration (FDA). They have stated their plans for us, so read, be warned, and act accordingly.

At the moment, the public is regulation minded. Everybody wants everything and everybody regulated except himself and his own ac-

tivities. As they have not as yet been able to grasp the fact that such is not possible, and as a large percentage of those making the most noise have little to regulate anyhow, all are crying out to Washington for protection. None of us is clean. Washington is responding in the only way it can. It regulates. And it will continue to do so until the people of this republic, including ourselves, stop trying to get everyone else regulated and go back to the principle adhered to by our Founding Fathers that the best government is the least government.

J.B.T.

Hot Spots in the Public Weal

I have in the past had a good deal to say in these pages about nuclear perils. There are admittedly two schools of thought on the matter of the safety and desirability of nuclear power (few if any argue that nuclear weapons are either safe or desirable, no matter how necessary they believe them to be). We are periodically regaled by the antinuclear crowd on the inadequacy of safety measures in nuclear power plants and on the dangers from wastes, both from radiation exposure and from the impossibility of maintaining security against theft of plutonium, out of which nuclear weapons can be made. The charges are countered, mostly by the Atomic Energy Commission, and then the whole thing sort of goes away—for a while.

Every now and then a breach occurs which fans the flame of the dissenters, and the issue lights up again. Two of these breaches came almost simultaneously a short time ago, and though there were the usual demonstrations by the opponents of nuclear anything, it is the reaction—or lack of it—by the people most intimately concerned that I wish to consider.

The first incident was the disintegration on its unexpected return from space over Canada of a Soviet spy satellite containing a nuclear generator. After intensive search a small amount of radiation was detected in the wilds of the Northwest Province. Questioned as to their feelings on the matter, the inhabitants of the area manifested colossal lack of concern. A government spokesman commented that they accepted this as just one more hazard to be faced in living in that part of the world.

The second incident was an unexplained radiation leak in a nuclear power plant near Denver. Owners of a farm close by said they would

evacuate only if required to. It is, they said, just one of those things.

We live in a complex society dependent on almost immoral amounts of power, considering the poverty of the world at large. If we are to maintain our standard of living in the face of a growing population and a burgeoning technology, this power requirement can do nothing but increase, even as our fossil fuel supply is nearing critical shortages. The energy has to come from some place. Wind is a minor transitory source. At present, solar energy is an uncertain factor. Nuclear reactors are presently our most dependable substitute.

A recent issue of *Harper's* contained a lengthy editorial in answer to what the writer of a letter to the editor considered the magazine's espousal of unpopular (to him) causes, and keeping things stirred up, so to speak. The editor pointed out that in a democracy there must by its very nature always be tensions—that there can never be peace and quiet. Peace and quiet, he said, come from imposition of standards from on high—in short, by a monarchy or a dictatorship. In a democracy, he went on to point out, balances of power are constantly shifting, and today's "ins" are tomorrow's "outs" and vice versa.

Those individuals most concerned with the recent breaches in radiation security accepted the facts as a part of our modern condition. They were not blasé—only realistic. Every one of us needs to exercise the responsibility of citizenship by first recognizing and facing the issues, then weighing the consequences, and finally making a choice. In this case it is very simple. Part of the cost of the energy we need to maintain the way of life we now have is the risk of radiation exposure.

As with most things, you pays yo' money and you takes yo' choice. You can't have it both ways. But God willing, the choice will be the people's and not the federal bureaucracy's (spelled d-i-c-t-a-t-o-r!). That's the hottest spot of all in the public weal.

J.B.T.

Sea Fever

I must go down to the sea again, to the lonely
sea and the sky . . .

All I ask is a windy day with white clouds flying,
And the flung spray and the brown spume,
And seagulls crying.

John Masefield

An interviewer once remarked to Peter Ustinov

that it must be difficult for a man who had lived so many different places to identify any single one as his "home town," or even his native country, and did he have one? The actor replied it was indeed difficult, but he guessed he felt more at home on the sea than anywhere else. He observed this feeling is shared by a great many people the world over, many of whom have never really spent much time there. He said he guessed it is a sort of innate nostalgia deep in the subconscious for the aquatic existence of our progenitors in the dim past. Maybe so. Certainly every one of us spent the first nine months of his life in the water, so perhaps Peter Ustinov has found the key.

A lot is lacking of the seashore's usual fascination on a dull, gray, cold, windy, wintry day. Even so, it has its attractions. Different, yes. Dull—definitely no. The sky is mottled with varying shades of gray, but it is all gray, and instead of a sharp horizon, the gray sky seems to blend imperceptibly into the darker blue-gray-green of the water, which fidgits around making streaks in much the same way as the sky makes blobs. Close in, the water sort of melts away into the squiggly brown-beige-tan bands of sand which becomes white just past where the dying waves are busily embroidering lacy filigree in perpetually new patterns. The scene ends in the wispy brownish-green of the dunes. It is a pastel on cold paper. You need to see it close-up. You need to be a part of it.

The salt wind in your face makes it real enough. The lace becomes scurrying bubbles and tossing grains where the water is liberating prisoners of the blowing sand—bits of coral, soft red polyps just dead, and hard white skeletons; shells, mostly fragments—mute testaments to the violence of the waves; strands of seaweed and pieces of wood and coconut hulls; an occasional beached starfish. Ejecta from the ocean depths, and offal from the shore—at its worst a bent beer can or a lotion bottle, mercifully few.

Even the scrubby vegetation on the dunes looks cold, wrapped as it is in the sandy mantle spread over it by the less than gentle hands of the winter wind. And there is small comfort for the few gulls and sandpipers trying to dig a meal from the soggy beach, where an occasional gull tail feather witnesses to the competition for food. Fishing seems poor. No gulls are at it.

There are the gulls, the sandpipers, the sand, the sea—and there am I, encased in layers of sweaters and a hooded windbreaker. No other

human life is in sight. Except for a beer can or two and a single line of footprints without an owner there is not even a sign of human life. So what am I doing there?

Peter, I've come home!

J.B.T.

Elegy for a Wave

Sometimes I have a hard time coping with the miracles of modern transportation. I left home in Nashville one morning before daylight and drove for nearly an hour on snowy roads to get to the airport. Everything was white. There was snow on the ground and snow on the trees, and snow on the shrubs and grass struggling to be recognized amidst all that expanse of white. So when I was seated for dinner that evening before a picture window in a dining room on the Gulf Coast and looked out into the dark onto an illuminated expanse of white with some sprigs of vegetation sticking up through it, it was hard for me to shift mental gears and realize I was looking out not on snow, but sand.

What helped me make the transition was the breaking waves in the background. When everything else is black, and all you see is the white of the sand and the foam of the breakers, you get a better perspective on what happens in the surf. Out of the blackness come two or three flashes of white expanding laterally in a rush to unite. As with most unions there is commotion, and the spray goes high in the air at those collision points. The several breakers form an advancing, united front, only to peter out in the shallows, fading into a thin white line, finally fragmenting again into segments which individually are consumed by the blackness. This is repeated endlessly, but the pattern is always different, like snowflakes or fingerprints. Maybe nature just can't be consistent, but then again maybe it is just a display of her versatility.

I prefer the latter.

J.B.T.



Thaddens R. Bowers, age 82. Died January 13, 1978. Graduate of University of Maryland Medical School. Member of Sullivan-Johnson County Medical Society.

David H. James, age 89. Died January 19, 1978. Graduate of Vanderbilt University School of Medi-

cine. Member of Memphis-Shelby County Medical Society.

John M. Lee, age 91. Died January 20, 1978. Graduate of University of Tennessee School of Medicine. Member of Nashville Academy of Medicine.

Charles P. Oderr, age 69. Died January 28, 1978. Graduate of Washington University School of Medicine. Member of McMinn County Medical Society.

Thomas S. Weaver, age 67. Died January 30, 1978. Graduate of Vanderbilt University School of Medicine. Member of Memphis-Shelby County Medical Society.

new members

The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

BUFFALO RIVER VALLEY MEDICAL SOCIETY

L. Frank McBrayer, M.D., Centerville
James S. Rodgers, M.D., Greeneville

HAMBLEN COUNTY MEDICAL SOCIETY

John K. Davis, M.D., Morristown

KNOXVILLE ACADEMY OF MEDICINE

Paul S. Ambrose, M.D., Knoxville
William D. Black, M.D., Powell
Karl E. Bolstad, M.D., Knoxville
Patrick H. Burkhart, M.D., Knoxville
Robert C. Griffith, M.D., Knoxville
James H. Hill, M.D., Knoxville
William R. Janzen, M.D., Knoxville
M. B. McKinney, M.D., Knoxville
Toivo E. Rist, M.D., Knoxville
Charles E. Rutherford, Jr., M.D., Knoxville
William J. Schneider, M.D., Knoxville
N. H. Siddiqi, M.D., Knoxville
James W. Taylor, M.D., Knoxville
Frederick W. Witt, M.D., Knoxville

MAURY COUNTY MEDICAL SOCIETY

H. James Wiesman, M.D., Columbia

NASHVILLE ACADEMY OF MEDICINE

Jesse E. Dozier, M.D., Nashville
H. Earl Ginn, M.D., Nashville
H. David Hall, M.D., Nashville
James T. John, Jr., M.D., Nashville
Mohammad H. Qureshi, M.D., Nashville
Don A. Schweiger, M.D., Donelson

NORTHWEST TENNESSEE ACADEMY OF MEDICINE

Rodriguez R. Escarcega, M.D., Union City

PUTNAM COUNTY MEDICAL SOCIETY

Frederick J. Chapin, M.D., Cookeville
Stephen V. Goryl, M.D., Cookeville
James D. Panzer, M.D., Cookeville

WILSON COUNTY MEDICAL SOCIETY

Alton W. Pickett, M.D., Lebanon

personal news

Dennis C. Chipman, M.D., Kingsport, has been named president of Indian Path Hospital. Other medical staff officers include *Warren Y. Smith, M.D.*, vice-president; and *George W. Booze, M.D.*, secretary-treasurer, both of Kingsport.

The following physicians will receive certificates of Fellowship in the American College of Radiology at the College's 55th annual meeting in San Diego, April 9-14: *A. Everett James, Jr., M.D.*, Nashville; *Ronald E. Overfield, M.D.*, Nashville; *W. Webster Riggs, Jr., M.D.*, Memphis; and *Thomas N. Rucker, M.D.*, Kingsport.

For the first time the Henderson Civitan Club has presented a civic service award to a couple, *Dr. and Mrs. Oscar M. McCallum*. Dr. McCallum was recognized for his constant efforts to improve himself in his work and to improve the health of the area.

Henry P. Pendergrass, M.D., Nashville, professor and vice-chairman of the Department of Radiology at Vanderbilt University School of Medicine, was installed as president of the Radiological Society of North America at its annual meeting in Chicago.

A. Roy Tyrer, Jr., M.D., Memphis, has been named president of the Society of Medical Consultants to the Armed Forces.

W. E. Van Order, M.D., Chattanooga, retired Jan. 1, 1978, after practicing pediatrics for 50 years. The two children of Dr. and Mrs. Van Order honored both by establishing The Van Order Fund. The purpose of this fund is to furnish specialty therapy for ambulatory patients at T. C. Thompson Children's Hospital.

programs and news of medical societies

McMinn County Medical Society

The McMinn County Medical Society held its January meeting in association with the Sweetwater Valley Medical Society on Jan. 10 at the Springbrook Country Club. The speaker at the dinner meeting, Dr. B. W. Ruffner, a cancer specialist from Chattanooga, talked about the latest advancements in chemotherapy treatment for cancer patients.

Chattanooga-Hamilton County Medical Society

New officers of the Chattanooga-Hamilton County Medical Society, Inc., were named Jan. 24 during special ceremonies at the Chattanooga Golf and

Country Club. The newly installed officers are C. Robert Clark, M.D., president; James R. Royal, M.D., president-elect; and John F. Boxell, M.D., secretary-treasurer.

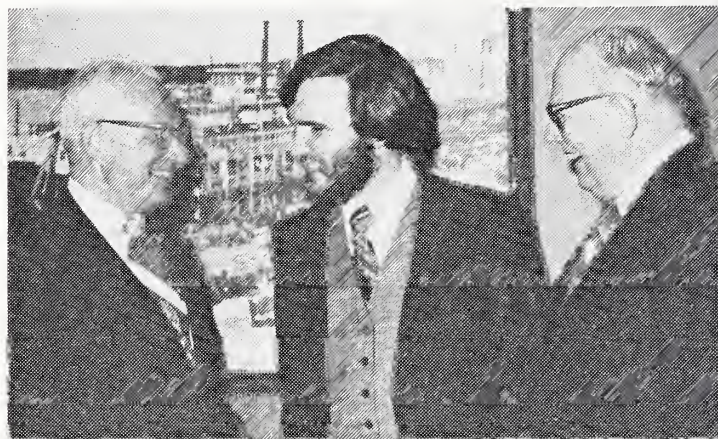
medical news in tennessee

Regional Medical Placement Committee Meets

Five regional placement committees have been formed to assist student participants in the state funded medical loan scholarship program to locate practice opportunities in physician shortage areas of Tennessee.

The committees, each consisting of two physicians, two hospital administrators, and one representative from the area health systems agency, offer assistance and advice to medical students and residents in finding suitable medically underserved areas of the state in which to set up practice.

The first regional meeting was held on Jan. 9 in Memphis to introduce the committee members to



Leslie B. Reynolds, M.D., Kingsport (left), Michael Hartsell, UT medical student (center); Col. W. W. Eledge, president, Tennessee Hospital Association (right).



Don Robinson, M.D., Cleveland (left); Fred Ralston, UT medical student, Fayetteville (center); Will G. Quarles, Jr., M.D., Livingston (right).

the medical students and residents who are in training in the Memphis area.

Physicians who attended the Memphis meeting were Leslie Reynolds, M.D., Kingsport; John Burrell, M.D., Lake City; Don Robinson, M.D., Cleveland; James Crutchfield, M.D., LaFollette; and Will G. Quarles, Jr., M.D., Livingston.

A total of 26 recipients of medical loan scholarships are now in practice in Tennessee, with a total of 138 more in training who will begin practice within the next six years.

national news

From the AMA's Office in Washington, D.C.

New Health Planning Guidelines Released

The federal government has released a second version of the controversial health planning guidelines, saying the revised rules contain "enough flexibility to be fair, and are tough enough to be effective."

When the original guidelines were published last fall in the *Federal Register*, the Department of Health, Education and Welfare received more than 55,000 mostly critical comments, the bulk from Texas, Iowa, and Montana, stating the belief that the rules were unfair to small, rural hospitals.

The response took the agency by surprise and the guidelines were withdrawn to be revised in such form as to be more acceptable. The revised rules will be open to comment until March 6 at which time the final regulations will be published.

HEW Secretary Joseph Califano emphasized that the guidelines are to serve as national standards for local Health System Agencies and state health planning bodies, which must make the final decisions.

The secretary said HEW's ability to enforce the guidelines is limited to two areas: (1) If a local hospital proceeded with capital expenditures in violation of a state adopted plan, HEW could withhold funds that are provided for reimbursement of depreciation costs. (2) HEW does have the power to "decertify" local HSAs that completely disregard the guidelines. However, Califano stressed that planning authority rests in local hands.

The revised guidelines propose these major standards:

- A maximum of four hospital beds per 1,000 people.
- An average annual occupancy rate of at least 80% for hospitals in a Health Service Area.
- At least a 75% average occupancy rate and at least 1,500 births annually for hospitals that provide care for complicated obstetrical problems.
- No more than four neonatal intensive and intermediate care beds per 1,000 live births.

- A minimum of 20 beds for pediatric units in urban areas.

- Average annual occupancy rate ranging from 65% to 75% for pediatric units, based on their size.

- At least 200 open heart procedures annually in any institution in which open heart surgery is performed for adults, and at least 100 heart operations annually in any institution in which pediatric open heart surgery is performed.

- At least 300 cardiac catheterizations annually in any adult catheterization unit, and at least 150 cardiac catheterization units annually in any pediatric catheterization unit.

- A service area with a population of at least 150,000 people, or treatment of at least 300 cancer cases annually, for megavoltage radiation therapy units.

- At least 2,500 procedures per year for each computed tomography scanner.

- Plans consistent with already established HEW standards and procedures for suppliers of end-stage renal disease services.

Califano Launches Anti-Smoking Campaign

Painting cigarette smoking as "slow-motion suicide," HEW Secretary Califano has launched a stepped-up government program against smoking.

Most of the effort will be to increase public awareness of the hazards of smoking, but Califano, an ex-smoker, has asked the U.S. Treasury Department to "examine a range of possible measures, including a general increase in the federal excise tax on cigarettes and a graduated tax according to the tar-nicotine content of cigarettes."

Califano also asked the Federal Trade Commission to "consider recommendations to strengthen warnings on cigarette packages and in advertisements and to empower the federal government to set maximum levels for tar, nicotine, and carbon monoxide in cigarettes."

He also requested major providers of health, fire, life, and disability insurance to "consider offering special premium discounts and other advantages to nonsmokers, so that they will no longer have to bear so heavy a part of the enormous cost generated by smokers."

The secretary announced that the Food and Drug Administration is revising the patient labeling of oral contraceptives and adding a prominent warning against smoking. The warning will read: "Women who use birth control pills should not smoke." Subsequently, the FDA made such an announcement.

Califano also said he would ask the FDA "systematically to investigate the interaction of smoking with other therapeutic drugs, so that users who smoke can be made aware of the special dangers they face."

The White House displayed a notable lack of enthusiasm for Secretary Califano's anti-smoking

drive, according to a byline story in the *Baltimore Morning Sun*.

"Aides to President Carter fear that the campaign will be ineffective and that it will be interpreted as excessive government interference in Americans' private lives," the *Sun* reported.

"We're certainly worried about the danger smoking poses to health," says Dr. Peter Bourne, Mr. Carter's adviser on health issues. "But we're also concerned about a major fanfare over new initiatives, whose results are likely to be unclear."

"We are eager that a program like this be very practically oriented, where the goals are clearly laid out and able to be achieved," Dr. Bourne added in an interview.

"The feeling at the White House is that the HEW plan is not such a program," the *Sun* concluded.

Project Integrity

More than 2,400 doctors and druggists providing subsidized health services to needy persons have been identified as having "patterns of practice indicating a likelihood of fraud and abuse," HEW Secretary Califano has said.

He announced new details of Project Integrity, a program of HEW searching for corruption in subsidized medical care.

HEW has issued regulations, required under 1977 antifraud legislation, that set requirements for states creating fraud and abuse control units to monitor the federal-state Medicaid program.

The units should operate separately from the agency administering a state Medicaid plan, have the capacity to prosecute fraud or refer allegations of fraud to prosecutors, and investigate complaints from patients in nursing homes and mental institutions.

If states create such units, HEW will reimburse them for 90% of their operational costs, a government spokesman said.

Califano said Project Integrity has screened the billing claims of all 275,000 Medicaid physicians and pharmacists "and identified over 2,400 with patterns of practice indicating a likelihood of fraud and abuse."

More than 450 of the 2,400 doctors and druggists are being investigated for potential Medicaid abuses.

Another 400 are undergoing "detailed field checks for potential criminal fraud," Califano said.

Cases involving about 200 have been closed as not warranting further investigation. The other cases are still in the investigation pipeline, Califano said.

HEW also plans to review another 44,000 cases where preliminary information has indicated the possibility of fraud and abuse.

Physician Shortages Pinpointed

The number of Americans living in areas officially designated as having a physician shortage could increase by 56% to a total of 25 million under new criteria proposed by HEW.

Communities designated as having a physician

shortage are eligible to apply for physicians services provided through HEW's National Health Service Corps or related federal programs. Of the estimated 25 million people, 15 million reside in inner cities according to the definition of what constitutes a shortage area. The remaining 10 million are in rural areas.

A shortage area under both new and former criteria may range in size from a group of neighboring counties to an urban neighborhood. Previously, a critical shortage level was reached when there were 4,000 or more people per primary care physician. The new criteria lowers the level to 3,500 or more per physician and even lower levels may be designated if indicators of need—infant death rates, health status of population and access to health services—are considered significantly adverse.

Separate shortage criteria are proposed for dentists, psychiatrists, pharmacists, podiatrists, optometrists and veterinarians.

HEW to Lose "E"?

After years of wrangling politics, President Carter has decided to push for the establishment of a separate, cabinet-level department of education as part of his plan for governmental reorganization.

To remove the decision as much as possible from the political arena, the President will appoint a special commission to study the need for such a move. Insiders say, however, that the commission will be stacked to assure the recommendation of the new department.

Long a strong opponent against splitting up HEW, Secretary Califano said in reference to the White House proposal: "The President has made his decision, and as I have repeatedly stated, will work to achieve the President's objectives in this area, as in all others."

Health Care Costs Up Again

The cost of health care has risen for the population as a whole from 6.2% of the gross national product in 1967 to 8.6% of the GNP in 1976. During these same years the cost for a semi-private hospital room rose 169% and operating room costs rose 175%.

According to HEW's Annual Report on Health, life expectancy in the United States has continued to lengthen and is now at a new high of 72.5 years for those born in 1975. Life expectancy for those over 65 years has also increased, climbing 2.2 years since 1950.

HEW reports that 29% of the nation's health care expenditures in 1976 were for treating those over 65. Per capita annual expense in this age group was \$1,521.

The share of public funding for health care in the elderly has risen from 30% in 1966 to 68% in 1976, and the number of beds in nursing homes tripled between 1963 and 1973.

Between 1950 and 1974 the number of physicians in the United States rose 70% from 232,697 to

394,448. The ratio of physicians to population increased 22% in this period from 14.9/1,000 to 18.2/1,000.

Physician visits per person per year were 5.0 in 1973 and 4.9 in 1976. The average length of a hospital stay was 8.1 days in 1973 and 7.9 days in 1976. The percentage of persons with one or more hospitalizations in one year was 10.7% in 1973 and 1976. Hospital discharges per 100 persons per year totaled 13.9 in 1973 and 14.1 in 1976.

The report also noted the rates of immunization among American children. In 1975, 32% of children aged 1 to 4 years were not protected against measles, 38% were not protected against rubella, and 35% had no protection against polio.

Cookbook Surgery?

Under an HEW contract, the American Association of Professional Standards Review Organizations has identified 11 surgical procedures which it says "have a significant potential for inappropriate utilization."

The association's national council has adopted a set of screening criteria for these procedures which will be sent to local PSROs. The surgical criteria "must not be viewed by local PSROs as mandating national standards," says the chairman of the association's Surgical Criteria Committee, John Bussman, M.D., of Portland, Ore.

Rather, the local PSRO "may wish to adopt or adapt the screening criteria for local use." In a letter to the association's national council—"our committee has learned through experience and communications with PSROs across the country that the 11 procedures have a significant potential for inappropriate utilization," Dr. Bussman said.

The 11 surgical procedures are abdominal hysterectomy, vaginal hysterectomy, coronary arteriography, cataract removal, dilatation and curettage, tonsillectomy and adenoidectomy, cholecystectomy, hiatal hernia repair, lumbar disc excision for rupture or protrusion, meniscectomy, and appendectomy.

With respect to vaginal and abdominal hysterectomy, a subject of national attention, the national council said: "Sterilization by abdominal (or vaginal) hysterectomy is acceptable only in the presence of concomitant uterine disease."

Blood Labeling Regs

All whole blood drawn after May 15, 1978, for transfusion must be labeled "paid" or "volunteer" donor.

The final regulation of the FDA specifies that persons who do not receive monetary payment for blood are classified as volunteers. The "volunteer" designation includes those who receive benefits other than money, such as membership in a blood assurance program or leave from work.

The labeling requirement also covers red blood cells, antihemophilic factor, platelet concentrate, and single plasma.

The blood labeling rule caps a lengthy nationwide debate on national blood policy. In issuing the regulation, FDA Commissioner Donald Kennedy, Ph.D., said the labeling rule is "consistent with the goals of the government's national blood policy to move the country to an all volunteer system."

The incidence of post-transfusion hepatitis has been reported to be three to ten times higher with blood from paid donors versus blood from volunteers.

Dr. Kennedy said that 10,000 to 30,000 cases of post-transfusion hepatitis occur each year in the United States with at least 400 deaths resulting.

Opinion Polls on NHI

Last October HEW conducted more than 100 hearings around the country to assess public opinion on national health insurance (NHI).

Now HEW has published its distillation of the people's voice, saying that the nation wants an NHI system to "build on the strengths of the existing system, reflect the lessons learned in other countries having 'mature' health insurance programs, develop approaches for coping with the current and anticipated cost pressures, and stress preventive care and health education efforts."

The report notes "while the public recognizes the need for NHI policy development, it urged that HEW proceed with extreme caution and gain from the positive and negative experiences of other nations, such as England, Sweden and Canada. The public's attitude is one of 'caveat emptor' for they do not want to decrease the quality and availability of medical care nor significantly increase the costs."

Over 8,600 individuals and organizations presented their view at the hearings and the report, written largely by HEW staff in the Atlanta Regional Office, says "while these hearings demonstrated that a majority of the American public favors development of an NHI plan, there was no agreement on the type of plan we should establish."

At least one area of the country, the Midwest, strongly opposes NHI in any form. The majority sentiment in Kansas, Missouri, Iowa, and Nebraska is on record as being against the idea.

With respect to physician reimbursement the report says "virtually all respondents other than practicing physicians who dealt with the issue of physician reimbursement supported something other than fee-for-service, and a great many nonphysicians expressed the opinion that the allowable fee (in whatever way that is to be determined) should constitute payment in full from an NHI program."

The HEW report also claims that "there was strong support voiced for utilizing primary care practitioners (physician assistants, nurse practitioners, etc.) in lieu of physicians."

There was a "clear consensus," in eight of the ten HEW regions, that "there should be a mix of public and private financing," of NHI.

The New England states were divided on the mixing of public and private financing of health care.

"There was even stronger support for the view

that those presently without health insurance should be covered through public financing, the majority of Americans continuing to be covered through private insurance plans," the report says.

The report is titled "The National Health Insurance National Outreach Report."

announcements

CALENDAR OF MEETINGS

NATIONAL

1978

- Mar. 29-31 American Society for Clinical Pharmacology and Therapeutics, Peachtree Plaza Hotel, Atlanta
- Mar. 29-April 2 American Society for Dermatologic Surgery, Vacation Village, San Diego
- April 2-4 National Conference on High Blood Pressure Control, Hilton Hotel, Los Angeles
- April 2-8 North American Clinical Dermatologic Society, Breakers Hotel, Palm Beach, Florida
- April 5-8 Conference on Rural Health, Regency Hotel, Denver
- April 9-14 American College of Radiology, California Town and Country, San Diego
- April 10-13 American College of Obstetricians and Gynecologists, Disneyland Hotel, Anaheim, California
- April 17-20 American College of Physicians, Sheraton-Boston, Boston.
- April 17-20 Southwestern Surgical Congress, Riviera Hotel, Palm Springs, California
- April 23-27 American Association of Neurological Surgeons, Fairmont Hotel, New Orleans
- April 24-25 American Broncho-Esophagological Association, Breakers Hotel, Palm Beach, Florida
- April 24-29 American Academy of Neurology, Bonaventure Hotel, Los Angeles

- April 28-29 American College of Clinical Pharmacology, Sheraton-Palace, San Francisco
- April 30-May 3 American Association of Plastic Surgeons, St. Francis Hotel, San Francisco
- May 3-6 American Pediatric Surgical Association, The Homestead, Hot Springs, Virginia
- May 3-6 American College of Legal Medicine, Stanford Court, San Francisco
- May 4-6 American Association for the History of Medicine, Kansas City, Kansas
- May 4-6 Christian Medical Society, Navigators HQ, Glen Eyrie, Colorado
- May 4-7 Association of Clinical Scientists, Drake Hotel, Chicago
- May 4-7 American Society of Internal Medicine, San Francisco
- May 5-7 American Academy of Psychoanalysis, Atlanta
- May 8-10 American Association for Thoracic Surgery, Hyatt Regency, New Orleans
- May 8-12 American Psychiatric Association, Georgia World Congress Center, Atlanta
- May 14-17 American Lung Association, Sheraton-Boston, Boston
- May 14-17 American Thoracic Society, Sheraton Hotel, Boston
- May 14-19 American Society for Microbiology, Hilton Hotel, Las Vegas
- May 19-20 American Association of Clinical Urologists, Washington Hilton, Washington, D.C.
- May 21-25 American Urological Association, Hilton Hotel, Washington, D.C.
- May 24-27 American College of Sports Medicine, Capital Hilton, Washington, D.C.
- May 1978 American Academy of Facial Plastic and Reconstructive Surgery, The Breakers, Palm Beach, Florida

STATE

- April 12-15 Tennessee Medical Association, Hyatt Regency, Knoxville

The continuing medical education accreditation program of the TMA has full approval by the Liaison Committee on Continuing Medical Education. An accredited institution or organization may designate for Category 1 credit toward the AMA Physician's Recognition Award those CME activities that meet appropriate guidelines. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Ave., Nashville, TN 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

IN TENNESSEE

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman, can plan an individualized program of one to four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, ward rounds, learning individual procedures, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

Participating Departments and Divisions

Allergy & Immunology	Samuel Marney, M.D.
Anesthesiology	Bradley E. Smith, M.D.
Cardiology	Gottlieb C. Friesinger, III, M.D.
Chest Diseases	James D. Snell, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Dermatology	Lloyd King, M.D.
Diabetes	Oscar B. Crofford, M.D.
Endocrinology	David Rabin, M.D. David N. Orth, M.D.
Gastroenterology	Steven Schenker, M.D.
General Internal Medicine	W. Anderson Spickard, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.
Medicine	Grant W. Liddle, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Oncology	Robert Oldham, M.D.
Orthopedics	Paul W. Griffin, M.D.

Pathology	William H. Hartmann, M.D.
Pediatrics	David T. Karzon, M.D.
Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Everette James, Jr., Sc.M., J.D., M.D.
Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sargent, M.D.
Surgery	
Cancer Chemotherapy	Vernon H. Reynolds, M.D.
General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neill, M.D.
Plastic	John B. Lynch, M.D.
Renal Transplantation	Robert E. Richie, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.

Eligibility: All licensed physicians are eligible.

Administrative Fee: \$200.00 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1) and American Academy of Family Physician's Continuing Education accreditation.

Application: For further information and application, contact: Paul E. Slaton, M.D., Director, Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

Continuing Education Schedule 1978

March 22-24	Clinical Endocrinology: Update 1978 (20 hours)
March 27	7th Annual James C. Overall Visiting Professorship-Pediatric Pulmonary
April 20-21	Legal Medicine with Particular Reference to Diagnostic Imaging (14 hours)
April 21-22	Annual Barney Brooks Lectureship in Surgery/Scott Society (1 hour)
April 27	Annual Frank H. Luton Lecture in Psychiatry (1 hour)
April 27	Current Concepts in Medical Oncology
April 28-29	2nd Annual Gynecological Oncology Course (11 hours)
May 1-2	Family Therapy Seminar
May 4-6	American Association of Medical Dosimetrists
May 18-19	17th Annual Seminar in Psychiatry (for nonpsychiatrists) (11 hours)
May 18-21	Scientific Sessions of the Vanderbilt Medical Alumni Reunion (11 hours)
May 29- June 3	Annual Family Practice Intensive Review (40 hours)
June 25-30	Pharmacokinetics
July 6-9	Contemporary Clinical Neurology—Hilton Head, S.C. (16 hours)

Sept. 21-22 Postgraduate Course in Allergy
 Fall, 1978 Parenteral Alimentation
 Fall, 1978 Update in Management of Urologic Tumors

For information contact: Vanderbilt Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

MEHARRY MEDICAL COLLEGE SCHOOL OF MEDICINE

Extended Continuing Education Program

Arrangements have been made with the following services and departments in the medical school to allow practicing physicians to participate in that service's activities for a period of one to four weeks. This program provides an opportunity for physicians to study in depth for a specified period. The schedule of activities is individualized in response to the physician's request by the participating department. The experience includes conferences, ward rounds, audiovisual materials and contact with patients, residents and faculty.

Participating Departments

Anesthesiology	Ramon S. Harris, M.D.
Family Practice	John Arradondo, M.D.
Internal Medicine	
Cardiology	John Thomas, M.D. Kermit R. Brown, M.D. Qamar A. Kahn, M.D.
Chest Disease	Joseph M. Stinson, M.D. Paul A. Talley, M.D. Edward A. Mays, M.D.
Dermatology	Thomas W. Johnson, M.D. David Horowitz, M.D.
Gastroenterology	Ludwald O. P. Perry, M.D. Buntwal M. Somayaji, M.D.
General Medicine	Edward A. Mays, M.D.
Hematology/Oncology	Robert S. Rhodes, M.D. Robert S. Hardy, M.D.
Neurology	Calvin L. Calhoun, Sr., M.D. Gregory Samaras, M.D.
Obstetrics & Gynecology	Henry W. Foster, M.D.
Gynecological Endocrinology	Elwyn M. Grimes, M.D.
Ophthalmology	Axel C. Hansen, M.D.
Orthopedics	Wallace T. Dooley, M.D.
Pathology	Louis D. Green, M.D. John C. Ashhurst, M.D.
Pediatrics	E. Perry Crump, M.D.
Surgery	
General	Louis J. Bernard, M.D.
Neurological	Charles E. Brown, M.D.
Thoracic and Cardiovascular	David B. Todd, M.D. Ira D. Thompson, M.D.
Urology	Marcelle R. Hamberg, M.D.

Fee: \$100 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1), American Academy of Family Physicians Continuing Education Accreditation and Continuing Education Units by Meharry Medical College.

Application: For further information contact Frank A. Perry, M.D., Director, Continuing Education, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

Continuing Education Schedule

April 20-22 Matthew Walker Surgical Symposium (20 hours)

May 24-26 Internal Medicine—1978 (24 hours)
 October Cleve Ewell Hematology Seminar (6 hours)

For information contact Frank A. Perry, M.D., Director of CME, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

UNIVERSITY OF TENNESSEE CLINICAL EDUCATION CENTER Chattanooga

Continuing Education Schedule 1978

March 28 Gastrointestinal Cancer — McMinn-Monroe County Medical Society
 March 29-30 Back & Knee Problems—A Clinical Approach—Chattanooga
 April 5 Diagnosis & Treatment of Cancer—Circuit Course, Cleveland
 April 11 Prophylactic or Preventive Antibiotic Usage — McMinn-Monroe County Medical Society
 April 19 Diagnosis & Treatment of Cancer—Circuit Course—Dayton
 April 25 Gynecologic Cancer — McMinn-Monroe County Medical Society
 April 25 Workshop on Basic Fetal Monitoring, Chattanooga
 April 26 Current Concepts & Indications for Pacing for the Primary Care Physician—Chattanooga
 April 29 Antibiotic Seminar—Chattanooga

For information contact: LeRoy J. Pickles, Director, Continuing Medical Education, Suite 400, 921 E. 3rd St., Chattanooga, TN 37403, Tel. (615) 756-3370.

UNIVERSITY OF TENNESSEE CENTER FOR THE HEALTH SCIENCES Knoxville Unit

Feb.-June Update in Obstetrics for Physicians—
 1st Friday University of Tennessee Memorial Research Center and Hospital, Knoxville.
 each month *Credit:* 8½ hours AMA Category 1 and AAFP elective. *Fee:* None (limited registration).

For information contact I. Ray King, M.D., or Mrs. Molly Meighan, Regional Perinatal Office, Drawer 26, 1924 Alcoa Hwy., Knoxville, TN 37920, Tel. (615) 971-3100.

EAST TENNESSEE CHILDREN'S HOSPITAL

April 18-19 A Day and One Half of Practical Pediatrics

May 2-3 Pediatric Infectious Diseases

For information contact: Karen Lee Shields, Committee on Continuing Medical Education, East Tennessee Children's Hospital, 2018 Clinch Ave., Knoxville, TN 37916.

IN SURROUNDING STATES

UNIVERSITY OF KENTUCKY

Mini-Residencies for Medical and Surgical Practitioners in Office Management Of Emotional Problems

The objective of this course is to give physicians an ideal emotional counseling technique that fits busy office practices. The technique uses a concept of emotions that is consistent with human anatomy and psycho-physiology. Yet, the technique requires no more physician time or patient cost than routine evaluations of new patients. Finally, the technique is readily understandable and easy for practitioners to apply.

One, two and three week courses. Minimum of 40 hours per week. *Tuition Fee:* \$350 per week for the 1st & 2nd week of training; \$500 for 3rd week of supervised practice with patients in the Intensive RBT Treatment Program.

For further information contact: Maxie C. Maulsby, Jr., M.D., Office of Continuing Medical Education, Dept. of RBT, University of Kentucky, Lexington, KY 40506.

Continuing Education Schedule 1978

- April 14-15 Diabetes Control: Why and How—Hyatt Regency Lexington, Lexington, Ky. *Credit:* 9 hours AMA Category 1. *Fee:* \$75.
- April 18-25 Controversies in Care (Obstetrics & Gynecology)—Location: Maui, Hawaii (leaving from Cincinnati, Ohio). *Credit:* 30 hours AMA Category 1. *Fee:* \$850.
- May 4-5 Medical and Behavioral Problems in Older Persons—Hyatt Regency Lexington, Lexington, Ky. *Credit:* 12 hours AMA Category 1. *Fee:* \$80.
- May 17-19 Surgical Diseases in Children: Radiologic Evaluation and Operative Correlation—Hyatt Regency Lexington, Lexington, Ky. *Credit:* 15 hours AMA Category 1. *Fee:* physicians, \$180; residents, \$90.
- June 25-30 Ninth Family Medicine Review (Sessions I, II, and III)—Hyatt Regency Lexington, Lexington, KY. *Credit:* 50 hours AMA Category 1 and AAFP. *Fee:* \$295.

For information contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, KY 40506.

UNIVERSITY OF MISSISSIPPI

- March 30- Gastroenterology Update—Ramada
April 1 Inn Coliseum, Jackson, Miss. *Credit:* 18 hours AMA Category 1 and AAFP. *Fee:* \$150.

For information contact: Continuing Education, University of Mississippi Medical Center, 2500 N. State St., Jackson, MS 39216.

MEDICAL COLLEGE OF GEORGIA

- March 30- Gastroenterology: The Hollow Or-
April 1 gans—Atlanta Marriott Motor Hotel, Atlanta. *Credit:* 16 hours AMA Category 1 and AAFP prescribed. *Fee:* \$150.00.
- May 2 Orthopedics and Pathology

For information contact: Division of Continuing Education, Medical College of Georgia, Augusta, GA 30901.

GEORGIA LUNG ASSOCIATION

- June 14-18 Third Annual Symposium on Lung Disease—The Cloister, Sea Island, Ga.

For information contact Betty Rafshoon, Georgia Lung Association, 1383 Spring St., N.W., Atlanta, GA 30309, Tel. (404) 876-3601.

BOWMAN GRAY SCHOOL OF MEDICINE

Course in Ultrasound

An eight-week postgraduate course in sonic medicine at Bowman Gray School of Medicine will be offered on April 3-May 26, 1978. *Credit:* 30 hours per week in AMA Category 1. An additional two-day real time course is offered for obstetricians on June 1-2, 1978. *Credit:* 10 hours per day in AMA Category 1.

For information contact: James F. Martin, M.D., Director, Center for Ultrasound, Bowman Gray School of Medicine, Winston-Salem, NC 27103.

DUKE UNIVERSITY MEDICAL CENTER

6th Annual Radiology Tutorial

- April 3-7 The Radiology of Neoplastic Diseases—Duke University, Durham, N.C. *Credit:* 27 hours AMA Category 1.

For information contact: Robert McLelland, M.D., Radiology—Box 3808, Duke University Medical Center, Durham, NC 27710, Tel. (919) 684-4397.

OF SPECIAL INTEREST

NEW ORLEANS GRADUATE MEDICAL ASSEMBLY

March 31- April 4 The High Risk Patient—The Fairmont, New Orleans. *Credit:* AMA Category 1, AAFP, ACEP. *Fee:* non-member physicians, \$200; military or registered nurses, \$100; students, residents, interns and Fellows, no charge.

For information contact: New Orleans Graduate Medical Assembly, Room 1538, Tulane Medical Center, 1430 Tulane Ave., New Orleans, LA 70112, Tel. (504) 525-9930.

AMERICAN INSTITUTE OF ULTRASOUND IN MEDICINE, INC.

April 2-9 4th Annual Spring Educational Meeting—San Juan, Puerto Rico. *Fee:* AIUM and ASUTS members, \$190; nonmembers, \$240; residents, fellows, students, \$150.

For information contact: AIUM/Puerto Rico '78, AIUM Executive Office, 6161 N. May Ave., Suite 260, Oklahoma City, OK 73112, Tel. (405) 840-3723.

WEST VIRGINIA CHAPTER—AAFP

April 7-9 26th Annual Scientific Assembly—Holiday Inn Charleston House, Charleston, W. Va. *Credit:* 17 hours.

For information contact: William B. Ferrell, Jr., Executive Secretary, West Virginia Chapter American Academy of Family Physicians, Route 4-Box 22A, Charleston, WV 25312, Tel. (304) 776-1178.

AMERICAN COLLEGE OF PHYSICIANS

A comprehensive schedule of continuing medical education activities for a 12-month period beginning in August, 1977, includes regional meetings and postgraduate courses to be held at various locations throughout the United States and Canada.

The ACP Regional Meetings, lasting one to four days, are designed for practicing internists and physicians in related fields. They bring new developments in the basic sciences and clinical medicine from major research centers to internists who are unable to travel to medical meetings outside of their state, and also provide a vehicle for local physicians to report to their colleagues on investigative work and clinical experiences in the wide scope of subject areas included in the practice of internal medicine.

The ACP Postgraduate Courses provide the opportunity for in-depth study in fields covered by internal medicine and its subspecialties. Averaging three to five days, they are directed toward practicing physicians and are presented in association with medical schools and other teaching institutions.

For information and registration contact: Registrar, Postgraduate Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

Regional Meetings

*See September 1977 issue for complete
1977-1978 listing*

Postgraduate Courses

*See September 1977 issue for complete
1977-1978 listing*

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|-------------------|---|
| Mar. 22-24 | Clinical Endocrinology—Nashville, Tenn. |
| Mar. 23-25 | Clinical Recognition and Management of Heart Disease—Tucson, Ariz. |
| Mar. 29-31 | Diagnostic and Therapeutic Advances in Gastroenterology—Rochester, Minn. |
| Apr. 3-5 | Current Concepts in Clinical Oncology—Albany, N.Y. |
| Apr. 5-7 | Current Concepts in Clinical Infectious Diseases—Charlottesville, Va. |
| Apr. 12-14 | Laboratory Medicine—Rochester, Minn. |
| Apr. 26-28 | Applied Immunology: The Rheumatic Diseases, Birmingham, Ala. |
| Apr. 27-29 | Three Days of Hepatobiliary Diseases—Atlanta |
| May 8-12 | Advances in Clinical Medicine—New Haven, Conn. |
| May 8-12 | Recent Progress in Clinical Endocrinology: Physiological Approach to Diagnosis and Treatment—Ann Arbor, Mich. |
| May 10-12 | Clinical Auscultation of the Heart—Washington, D.C. |
| May 10-12 | Nuclear Medicine for the Internist—Rochester, Minn. |
| May 15-19 | Rheumatic Diseases: Clinical Aspects and Basic Mechanisms—Boston |
| May 22-24 | Multidisciplinary Management of Solid Tumors—Rochester, Minn. |
| May 22-24 | Hematology Update 1978—Rochester, Minn. |
| May 22-26 | Review of the Old and New in the Diagnosis and Therapy of Infectious Diseases, New Orleans |
| May 31-
June 3 | Clinical Cardiology—Update 1978—Vancouver, B.C. |
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June 21-28 9th Annual Summer Program in Human Sexuality—Indiana University, Bloomington, Ind. *Fee:* \$325.

For information contact Institute for Sex Research—Summer Program, 416 Morrison Hall, Indiana University, Bloomington, IN 47401.

ASSOCIATION FOR THE ADVANCEMENT OF MEDICAL INSTRUMENTATION

March 31- April 1 Computer Medicine Clinics (co-sponsored by Society for Computer Medicine, in conjunction with AAMI's 13th Annual Meeting)—Washington Hilton, Washington, D.C.

For information contact AAMI, 1901 N. Fort Myer Dr., Suite 602, Arlington, VA 22209, Tel. (703) 525-4890.

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The Estes Park Institute, a non-profit educational organization, will sponsor Hospital Medical Staff Conferences and Hospital Trustee Forums at the

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Nov. 12-16 Pacific Grove, California

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NETWORK FOR CONTINUING MEDICAL EDUCATION

Schedule for Upcoming Programs

March 20- April 2 Osteoporosis: A Disorder of Bone Remodeling (Pathophysiology-Diagnosis and Treatment-Prevention)—with Robert P. Heaney, M.D., vice-president for health sciences, Creighton University, Omaha, Neb. (1 hour AMA Category 1; AAFP Prescribed credit)

April 3-16 Is Hysterectomy Indicated?
Photochemotherapy for Psoriasis

TMA medical briefs

Biorhythm Fails to Meet Scientific Validity Test

Biorhythm has been subjected to the test of scientific analysis and has been found wanting, says a report in *Archives of General Psychiatry*, a journal of the American Medical Association.

Biorhythm is a theory that purports to identify periods of increased individual susceptibility to accident or misfortune on the basis of recurring biological cycles. We have good days and bad days, and these days can be predetermined by applying the mathematical theory of biorhythm, proponents say.

A research group representing Johns Hopkins University School of Medicine, the Baltimore City Hospitals, the Maryland Medical-Legal Foundation, Inc., and the University of Maryland School of Medicine gathered data from 205 carefully investigated high-way crashes.

Of the crashes, 135 were fatal, 70 nonfatal. In each, drivers were clearly at fault. The researchers then computed specific points in drivers' biorhythm

cycles at which the accidents occurred. The observed frequencies of accidents occurring during so-called critical and minus periods were then compared with the frequencies to be expected on a chance basis alone.

Conclusion: "The results provided no evidence for a relationship between purported biorhythm cycles and accident likelihood."

The researchers add: "We don't consider this result either a cause for elation or an occasion for a pseudoscientific diatribe on the foibles and follies of the lay public. The theory had a certain wistful appeal; the fact that it was examined and found wanting cannot, therefore, be attributed to any negative bias that somehow crept into the tabulation and analysis of the data."

The biorhythm theory has the effect of the self-fulfilling prophecy, they point out. If you think you will have a good day, you just might have one. The same with a bad day. Chance and coincidence may be magnified by expectations.

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JCAH Seeks Physician Surveyors

The Joint Commission on Accreditation of Hospitals (JCAH) is currently recruiting physician surveyors for its Hospital Accreditation Program (HAP). Expansion within HAP has created a need for additional full- and part-time physician surveyors (field representatives) and applications are now being accepted. The next training/orientation class is scheduled for May 15, 1978, at JCAH headquarters in Chicago.

Physician surveyors are responsible for the on-site review and evaluation of medical staff functions, departments, and services. They submit reports and make accreditation recommendations based on information obtained through interviews with hospital personnel, review of records and documents, and observations of the hospital's operations and procedures. In addition to their evaluation activities, surveyors provide valuable consultation and education to surveyed hospitals.

Surveyors must be currently licensed physicians with broadly based clinical backgrounds and experience in hospital medical staff practices. Consultative, communicative, and data collection skills are essential.

Physicians interested in applying for the surveyor positions, or those seeking additional information, should contact: Director of Personnel, Joint Commission on Accreditation of Hospitals, 875 N. Michigan Ave., Chicago, IL 60611, Tel. (312) 642-6061.

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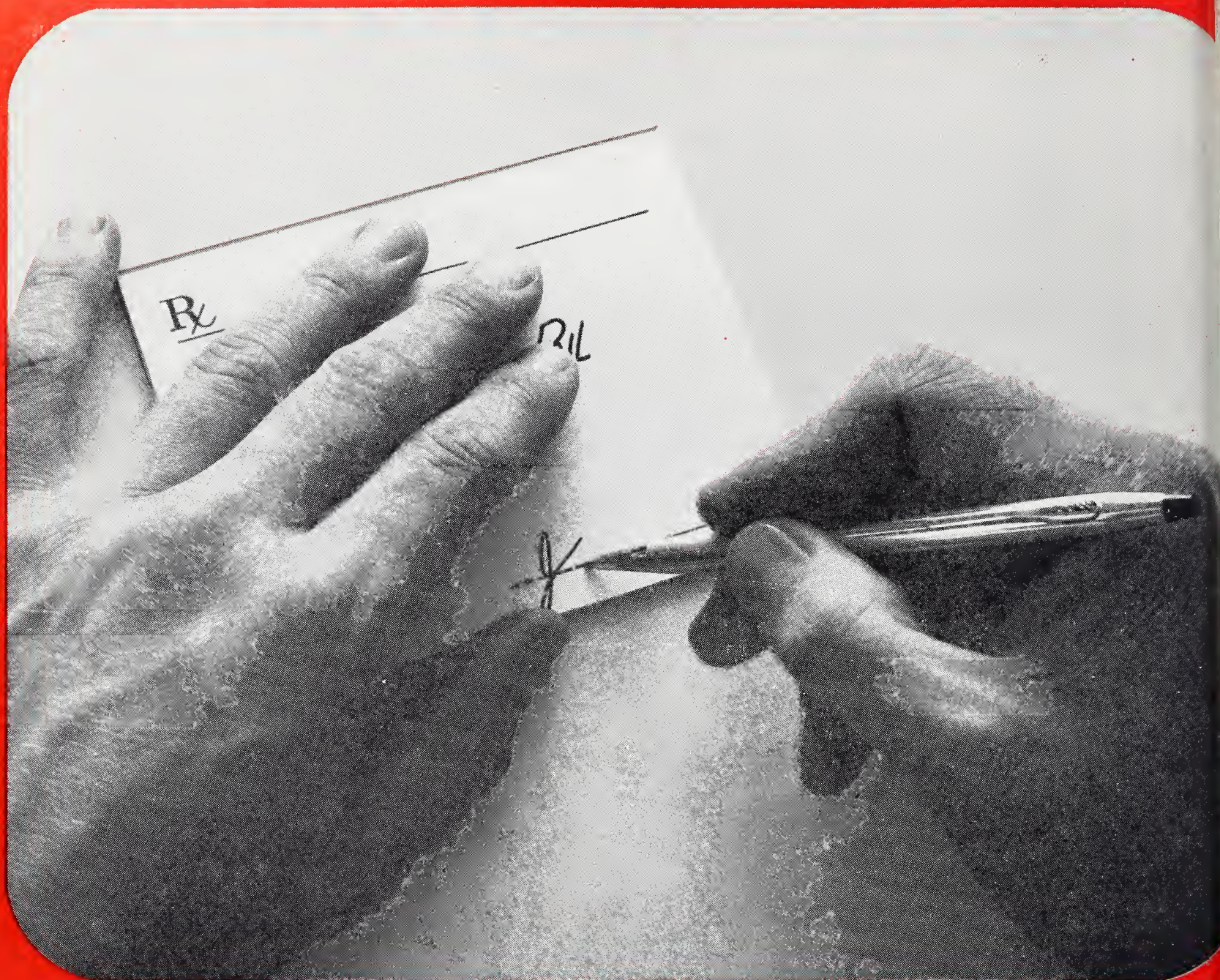
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Warnings: Use with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. Cumulative effects may develop in patients with impaired renal function. Use with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma. May add to or potentiate action of other antihypertensive drugs; potentiation occurs with ganglionic or peripheral adrenergic blocking drugs. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possibility of exacerbation or activation of systemic lupus erythematosus has been reported. Lithium generally should not be given with diuretics because they reduce its renal clearance and add a high risk of lithium toxicity. Read circulars for lithium preparations before use of such concomitant therapy.

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Precautions: Perform periodic determination of serum electrolytes to detect possible electrolyte imbalance. Observe all patients for clinical signs of fluid or electrolyte imbalance, namely, hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when patient is vomiting ex-

cessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs, irrespective of cause, are dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting. Hypokalemia may develop, especially with brisk diuresis in severe cirrhosis, with concomitant corticosteroid or ACTH therapy, with inadequate oral electrolyte intake. Hypokalemia can sensitize or exaggerate response of heart to toxic effects of digitalis (e.g., increase ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content. Any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver disease or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt except in rare instances when the hyponatremia is life threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients. Insulin requirements in diabetic patients may be increased, decreased, or unchanged; latent diabetes mellitus may become manifest. Thiazides may increase responsiveness to tubocurarine. Antihypertensive effects of the drug may be enhanced in post-sympathectomy patients. May decrease arterial responsiveness to norepinephrine; this diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use. If progressive renal im-

The 1918 Influenza Epidemic in Nashville

JOHN B. THOMISON, M.D.

Introduction

There has been a resurgence of interest in influenza this year, because whereas last year we had a vaccine without an epidemic, if the "Russian flu" moves in, this year we may have an epidemic with no vaccine. To have a major antigenic shift in the influenza virus in two consecutive years is rare, and the likelihood that neither would produce an epidemic is slim indeed.

During the push for the swine flu vaccine in the winter of 1976-77 the severity of the 1918 influenza epidemic was repeatedly emphasized. In spite of this, when I was doing research on the history of medicine in Nashville, I found little mention of the influenza epidemic, though there was considerable comment on enteric diseases such as cholera, and it appeared the cholera epidemic of 1873 was the worst epidemic Nashville ever had.

My sources of information were quite limited, as there are no health reports for Nashville and Davidson County between 1912 and 1943. Various reasons are given for this, the most convincing being that there were insufficient funds to publish the reports, and the manuscript versions were lost in the various moves of the health department. The 1912 cut-off is probably the result of the abolition of the board of health in that year, when the legislature initiated the City Commission System for Nashville. Fortunately, there is mention of the epidemic in the *Journal of the Tennessee Medical Association*, most importantly an epidemiologic study by Capt. R. C. Derivaux, an assistant surgeon in the U.S. Public Health Service assigned to the public health relief mission in Nashville during the epidemic,

and Dr. W. E. Hibbett, Nashville's health officer.¹

The first intimation that the epidemic, which extended from mid-September to late October, 1918, might not have been as bad as the "old-timers" paint it was that it made the *Nashville Banner's* front page only once, although there was a little more front page reporting of it in the *Tennessean*. Accounts of the flu epidemic nationwide suggest that when peace finally came from the war which had occupied everyone for the past four years, the world was so busy with the flu epidemic that peace came almost unnoticed. This certainly was not true in Nashville, where the epidemic had ended and where even during the epidemic almost all the news on the front page and a good percentage of it elsewhere concerned the war effort. Judging from newspaper reporting, the influenza epidemic was of less than disastrous proportions in Nashville.

Was the epidemic bad or not so bad? Were the newspapers and the health officers playing it straight, or were they underplaying its severity for wartime propaganda purposes, to boost morale, and prevent panic?

History

Influenza, also known historically as la grippe (grip), catarrhal fever, or "cat" fever in the Navy, is an acute infectious respiratory disease of man caused by one of the three distinct immunologic types of the influenza virus. The disease usually occurs in epidemics, often worldwide, showing high morbidity and low mortality. Though the clinical symptoms vary from one epidemic to another, and also from strain to strain, in general there is sudden onset of fever, usually with severe aching, pharyngitis, cough, and often leukopenia. The disease is usually self-limiting in three or four days.

¹From the Department of Pathology, Vanderbilt University Medical Center, Nashville, TN 37232.

All evidence suggests the disease is an ancient one, with explosive epidemics in populations over the world, and we have good descriptions of it as early as Hippocrates. Between 1510 and 1930 pandemics are recorded in which the symptoms are given almost precisely as they occur today, with a comment that few died of the disease except the old and the infirm. The pandemic of 1743 was exceptionally severe, and the death toll in London was as great as it was in American cities in the pandemic of 1918. It was in the 1743 epidemic that the disease was given the name *influenza*, from an Italian phrase which attributed the disease to *un influenza di freddo*, "an influence of cold," although the term "influence" was usually applied to stellar or planetary influence and only occasionally to such things as meteorologic conditions, miasms, or emanations from the earth—or cold.

In 1782 a severe pandemic involved Asia and Europe. The number of complications is said to have been very high, and during this epidemic the thesis of its infectious nature gained ground. Another hundred years were to elapse however before anywhere near accurate epidemiologic data were compiled and bacteriologic studies undertaken to determine the causative agent.

In 1892 Pfeiffer described the *Hemophilus influenzae*, which he thought caused the disease. In 1889 Abbot demonstrated spread to be independent of the direction of the prevailing wind. Everything seemed to be building to a climax. It occurred in the winter of 1918-19 with a pandemic of 200 million cases, in which about 20 million people died, a half million of them in the United States.

The 1918 Pandemic

The pandemic of 1918 differed from any previously reported in that the mortality rate of hospitalized cases (mostly pneumonia) was unusually high, varying from 15% to 30%, with the highest mortality in the 25 to 30 year age group. Over half the dead were younger than 50, and relatively few of them were old and infirm. Although it is certainly true that many of these patients died of streptococcal or pneumococcal pneumonia, many also died within the first 72 hours, making it almost certain that death was due to the influenza virus itself. It should be remembered that although at that time *H. influenzae* was considered to be the etiologic agent, the organism

was cultured from only three of the first eight autopsies reported from Cook County Hospital, and Pfeiffer himself, the discoverer of the organism, working in Breslau, Germany, was encountering a similar discrepancy, casting doubt on the etiologic significance of the agent. More puzzling still was the fact that many lung cultures were returning sterile.

Because of the multiplicity of organisms being isolated in series of cases the world over, there was no common ground for agreement as to the causative agent, although the Pfeiffer bacillus (*H. influenzae*) which was in many places most prevalent, probably had the greatest number of adherents. During the epidemic Dr. Ernest Goodpasture, who would become, in 1925, head of the Department of Pathology of the reorganized Vanderbilt Medical School, was stationed as a medical officer at the U.S. Naval Hospital in Chelsea, Mass., where the estimated mortality was between 25% and 30%. Reporting a series of autopsied cases,² he postulated an underlying cause which left the lung incapable of protecting itself against superimposed bacterial pneumonia.

Following his discharge from the service some months later, Dr. Goodpasture, then a member of the Department of Pathology of Harvard Medical School, reported two autopsied cases of influenza pneumonia,³ one of which terminated fatally seven days after the onset of illness but only two days following evidence of pulmonary involvement. The other patient survived his infection but died a month later of sterile hemorrhagic pneumonia with associated glomerular nephritis, the first reported case of Goodpasture's syndrome. These two cases, a part of the previously reported series from the Chelsea Naval Hospital, had sterile pulmonary cultures in the face of extensive lung damage.

The purpose of this second paper was to call attention to the lesion he had described previously, a lesion also described by MacCallum and Wolbach, which was a hyaline membrane partially or completely covering the walls of dilated alveolar ducts. Although it was present in cases with bacterial pneumonia, it occurred mostly in areas of the lung where there was little or no inflammatory exudate, and he considered it to be pathognomonic of nonbacterial damage to the lungs from whatever cause. He concluded that "in the absence of any known infectious agents one is led to the conclusion that they represent instances of fatal influenzal pneumonia, caused by an infectious agent of which we are totally ignorant, and

without secondary invasion of the lungs by any of the pathogenic bacteria commonly found associated with it . . . In interpreting these observations one feels justified in formulating the opinion that influenza is a distinct disease, recognizable clinically only by its epidemic proportions and extreme infectiousness, characterized pathologically by peculiar lesions in the lung, and caused by an unknown virus* which gained entrance through the respiratory tract."

Goodpasture's hypothesis was finally confirmed in 1933 with the isolation in ferrets of a virus from patients with influenza, and in 1934 the disease was produced in human volunteers with the virus, now called influenza Type A. The swine influenza virus, which had been discovered by Shope in 1931, was shown to be antigenically related to but not identical with influenza Type A. It was further shown that antigenic differences occur among Type A strains, differences which have great practical significance for immunization and patient resistance. In 1940 the Type B influenza virus was identified and in 1949 the less common Type C. Although most epidemics have been produced by various strains of the Type A virus, retrospective serologic studies indicate that the 1918-19 pandemic was caused by the swine influenza virus.

Facility of virus culture and serologic identification has made it possible to identify with accuracy the etiologic agent involved in epidemics and pandemics, and epidemiologic observations over the nearly 50 years since this became possible have indicated that although minor strain variations occur almost yearly, there are also periodic major changes in the virus. Because this produces a virus with which the population, or perhaps the younger members of it, has had no experience, there is almost invariably a rapid

* The term "virus" is an ancient one, which arose concurrently with the concept of transmissibility of disease. It was used as a general term in much the same way in which the term "germ" was used to refer to any disease-producing agent.

The term "virus" as used in 1919 referred to sub-microscopic, filterable, disease-producing infectious agents. After the beginnings of bacteriology in 1878, identification of microorganisms moved very rapidly, and it soon became apparent that there were infectious diseases for which no organism could be identified. Filterability of the agents through a porcelain filter became the accepted criterion for the designation "virus," so that the organisms were frequently referred to as "filterable" viruses. Using this criterion, the first virus was discovered in 1892, and in 1919 such diseases as scarlet fever and typhus were also considered to be virus diseases. Influenza on the other hand, was not. It was considered a bacterial disease.

spread leading to a pandemic. Until the failure of a pandemic, or even a major epidemic, to occur following reintroduction of the swine influenza virus into the human population in 1976, this was thought to be an invariable principle, but because the nation tooled up for a major epidemic last year, which failed to come off, the manufacturers of biologicals have become understandably gun-shy. This has resulted in apathy toward the development of another major serologic shift which occurred this past winter, so that instead of being faced now with a vaccine for which we have no disease, we may well be faced next winter with a disease for which we have no vaccine. The possibility of another 1918 epidemic was forecast for 1976. We may indeed see one in 1978.

In all the talk of possible pandemics in 1976, references were invariably made to 1918. But large numbers of people died from influenza in the winters of 1936-37, 1943-44, 1957-58, 1962-63, and most recently, though in somewhat smaller numbers, 1968-69. What then is so striking about 1918-19? In the first place there was a tremendous difference in the total excess deaths per 100,000 people (Fig. 1),⁴ which was approximately five times as high as the next highest figure, and over 20 times as high as that for any year in modern times. Another important factor was the depletion of the world of its resources and manpower by four long years of war. But probably the most important factor was that as with all plagues and natural disasters, even though the world was accustomed to heavy loss of life through battle casualty, it was totally unprepared for the pandemic which struck down what was left of its most productive citizens.

On Sept. 21, 1918, Camp Grant, Illinois, had a 650-bed hospital. Two weeks later there were 4,000 patients in it. The mortality rate was about 30%. In Europe the excess mortality in some places ran as high as 6,000 per 100,000 population. Reminiscing on his experiences as a 14-year-old youth in Germany, an Oklahoma radiologist comments,⁵ "As progressively more people died throughout the winter the reality of death dawned on individuals as it struck arbitrarily young and old, men and women, rich and poor, rural and city dwellers. It seems strange that the enormous number of fatalities caused by the just concluded war apparently had made less of an impression on the community and on me than the immediacy of the fatal epidemic around us."

The pandemic is said to have started in Madrid

INFLUENZA EPIDEMIC/Thomison

in the spring of 1918, and it came to be known as the "Spanish disease," or "Spanish flu," a name which is undeserved inasmuch as the disease had appeared in numerous places elsewhere, considerably earlier. Some German generals blamed the failure of their last offensive in the spring and summer of 1918 on the loss of so many men to the flu. Spain received the honor apparently because of censorship in the Allied and German armies, whose leaders were unwilling to admit to the widespread incapacitation of their troops.

Although the exact origin of the illness is difficult to pinpoint, search through both military and civilian records in all countries involved indicated the first recorded cases occurred in Fort Riley, Kansas, on March 11, 1918,⁶ and it is not unlikely that the disease spread throughout the world from that point. The disease proceeded in three waves, the first in the spring of 1918, then the "killer" wave in the fall of 1918, and finally

a somewhat milder wave in the early months of 1919.

The disease, which was to become known as the "purple death," quickly spread panic across the country. It prompted the following poem by an anonymous Illinois doctor:⁷

?Flu?
If we but knew
The cause of flu
And whence it comes and what to do,
I think that you
And we folks, too
Would hardly get in such a stew.
Do you?

It quickly ceased being funny. Before the winter was out a half million Americans would be dead of it, and the cost in loss of productive lives would reach into the billions of dollars, not counting the untold social misery, sickness, and personal loss that accompanied it. Roughly 25 million clinical cases of influenza, amounting to one fourth of the population, would produce disruption and virtual cessation of community life in many areas throughout the United States.

EXCESS MORTALITY DURING EPIDEMIC PERIODS, UNITED STATES, 1911-1976⁴

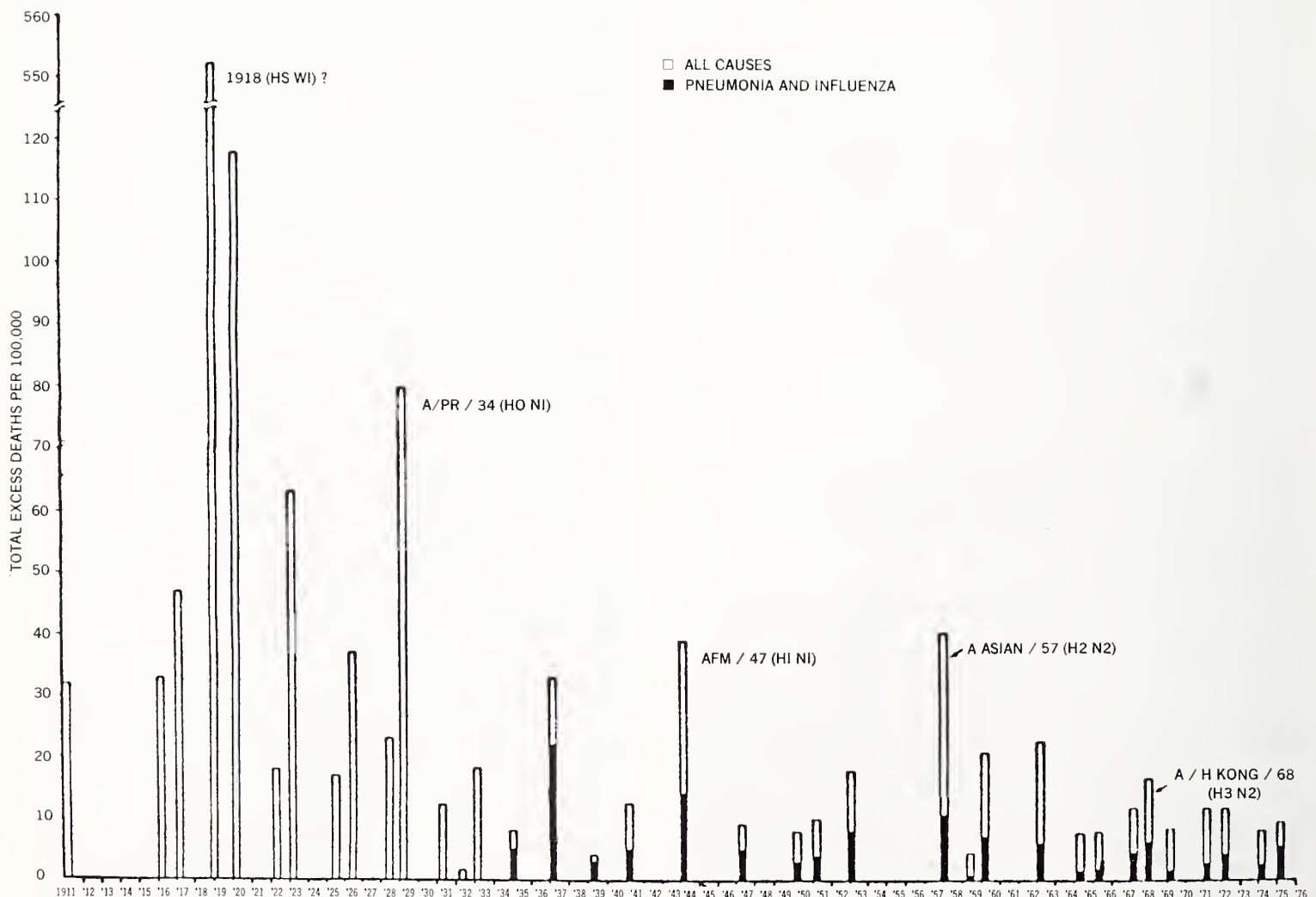


Figure 1

Entire families were stricken, often with no one to care for them, though there was a remarkably large number of dedicated volunteers. In the summer of 1918 American troops bound for the Western Front became a mere trickle, as flu caused 43,000 deaths in the U.S. Armed Forces in 1918, about 80% of the total number of American deaths in battle.

The Epidemic in Nashville

What of the disease in Nashville? Nashville at the time of the epidemic had an official population of approximately 120,000, but this was swollen by about 35,000 desperately crowded immigrants consequent to the location of a powder plant at Hadley's Bend, now Old Hickory, to approximately 155,000. There were approximately 40,000 cases of epidemic influenza from Oct. 1 to Nov. 15, of which 468 died, for a case fatality rate of 1.17%.¹ This means that in that six-week period about one person in four contracted the disease, and one person out of every 300 died of it, for a mortality rate of about 0.3%. By comparison, in 1873 Nashville had 27,000 inhabitants, 4,000 of whom became sick with cholera. One thousand of these died. Although the morbidity in the cholera epidemic was somewhat lower, about one in seven, the mortality rate was considerably higher, with a case fatality rate of about 25%, and a mortality rate of about 4%, which means one person out of every 27 died of cholera.

There are other differences also. In the cholera epidemic some areas of the city were virtually spared, while other areas, mostly those inhabited by the poor, were decimated, and in a few places nearly annihilated. Although the influenza epidemic showed definite patterns of spread, it showed no such selectivity. Perhaps it was not as bad as the cholera epidemic, but it was bad enough.

The disease made its appearance in the early days of September, reaching noticeable proportions by Sept. 16, and ten days later it had become apparent that epidemic status had been attained. We are hampered in our efforts to study the epidemic by the fact that all available statistics are based on estimates, as influenza was not previously, and in fact never became, a reportable disease locally, contrary to what it was in most other cities. In commenting on this, Dr. Derivaux said he believed reporting to be of questionable value in any case, because of lack of standards for diagnosis and the fact that

physicians in local practice were on almost constant duty day and night, with little time for filing reports. Numerical estimates then were based on verbal reports from physicians, collected by health workers and compiled by the health department. Nor do the compiled figures include the entire epidemic, but only the six-week period officially recognized as such. It appears there were cases all during the summer, and epidemic proportions were reached by Sept. 27. It was estimated that by the end of September there had been no less than 20,000 cases, raising the grand total to perhaps 60,000, with an indeterminate increase in the number of deaths.

Most of the reported cases occurred in the middle of October (Table 1), when 335 patients died, but for the three-month period October through December there were 579 deaths (Table 2). Forty-one percent of the dead were in the 20 to 39 year age group, and 60% were in the 15 to 49 year age group (Tables 3 and 4).

The epidemic began in South Nashville, a densely settled section in which many industrial workers, including many from the powder plant

TABLE 1
REPORTED DEATHS FROM INFLUENZA AT NASHVILLE,
OCTOBER, 1918

	White	Colored	Total
Oct. 1	5	0	5
Oct. 2	1	1	2
Oct. 3	6	0	6
Oct. 4	4	1	5
Oct. 5	5	0	5
Oct. 6	11	6	17
Oct. 7	17	3	20
Oct. 8	18	6	24
Oct. 9	19	5	24
Oct. 10	20	6	26
Oct. 11	19	10	29
Oct. 12	16	8	24
Oct. 13	18	9	27
Oct. 14	20	1	27
Oct. 15	17	2	19
Oct. 16	15	8	23
Oct. 17	14	11	25
Oct. 18	13	5	18
Oct. 19	10	4	14
Oct. 20	7	11	18
Oct. 21	9	0	9

TABLE 2
TOTAL DEATHS BY MONTH

Oct.	435
Nov.	61
Dec.	83
TOTAL	579

INFLUENZA EPIDEMIC/Thomison

in Old Hickory, lived. From there it spread to East Nashville and the center of the city, both of which also were densely populated by workers. As the disease waned in those areas, North and West Nashville, less densely populated but largely industrial, became the centers of highest incidence.

Nashville was ill-prepared to meet the challenge. The city of 155,000 people claimed 380 doctors, more than a third of whom were on active duty in the military service, leaving about 250 doctors to care for the quarter of the 155,000 people who would be sick with the flu, assuming all the doctors stayed well, which they did not. Almost every doctor in Nashville contracted the disease, and a number of them died, further depleting the thinned ranks. It quickly became apparent that organized relief measures had to be instituted very quickly, and the city public health nurses were given the sole duty of locating and classifying cases as to their severity.

On Sept. 30, Capt. Derivaux received telegraphic instructions to assume charge of the situation at the Old Hickory plant, and along with eight other public health assistant surgeons

he arrived the first week in October for duty in the Nashville area. They found a situation made acute by severe crowding of families, often in temporary and even uninhabitable buildings, incidental to the sudden 30% increase in population brought about by the location of the powder plant at Hadley's Bend. Moreover, there was a severe shortage of hospital beds.

A rapid increase in applications for admissions to the city hospital, far in excess of the capabilities of the institution, made necessary a quick decision about hospitalization of the sick. Establishment of emergency hospitals was ruled out by the severe shortage of both physicians and nurses, and also by Capt. Derivaux's opinion that emergency hospitals were of questionable value at best. The decision was therefore made to isolate the cases in their homes and to carry out their treatment there under the supervision of the public health nurses, who would periodically visit them. Physician consultation was left to the discretion of the nurse. Headquarters of this centrally organized house-to-house relief was in the office of the city health officer, where the public health nurses reported those cases deemed to be in need of physician care. Admission to the city hospital was granted only on certification by a physician. Two additional physicians and a number of nurses from the U.S. Public Health Service were added to the regular hospital staff. Transportation for the visiting physicians was supplied by the motor corps of the Nashville Red Cross chapter, who, along with the Nashville Golf and Country Club and the Centennial Club, gave material aid to the medical needs of the community.

By the second week in October, steps were introduced to limit contacts, though it was fairly well recognized that in such an epidemic there was probably no way to prevent exposure. The epidemic was now nationwide, all areas of the country being affected to one extent or another, particularly the military, where among the soldiers training in this country 12,975 cases had already been reported. Davidson County, as well as towns in adjoining counties, such as Springfield and Centerville, were even harder hit than Nashville. Some had no physicians at all, those who had not gone to war having been incapacitated by the flu.

On Oct. 7, Dr. Thomas Weaver became one of the earliest casualties among the medical profession, dying of pneumonia following a bout of the flu. On the following day, though the schools

TABLE 3
DEATHS BY AGE GROUPS
(468 DEATHS, OCT. 1-NOV. 15, 1918)

Age Group	No. of Deaths	% of Total
1 to 6 months	7	1.5
6 months to 1 year	15	3.2
1 to 2 years	42	9.0
3 to 4 years	32	6.8
5 to 9 years	36	7.7
10 to 14 years	20	4.3
15 to 19 years	40	8.6
20 to 29 years	110	23.5
30 to 39 years	83	17.7
40 to 49 years	46	9.8
50 to 59 years	14	3.0
60 years and up	23	4.9
TOTALS	468	100.00

TABLE 4
DEATH BY LIFE PERIODS

	Deaths	%
1 month, 9 years (infancy and childhood)	132	28.2
10 to 19 years (adolescence)	60	12.8
20 to 49 years (active adult life)	239	51.1
50 years and over (middle and old age)	39	7.9

still remained open, and though according to Dr. Hibbett there was no need for alarm, as new cases were not keeping step with the 15,000 cases which developed in the early days of the epidemic, an order went out banning all non-essential gatherings. The order, sent to proprietors of all amusements, which were considered nonessential, read, "You are hereby notified to close picture shows, theaters, carnivals, dance halls, billiard and pool parlors or other places of amusement until such a time as may be deemed suitable by the health officer in charge."

A decision was made on Oct. 8 to close the county schools for an indefinite period, as the physicians in the rural districts were not in a position to care for a general epidemic because their patients lived too far apart. On the other hand, following a conference between the superintendent of the city schools, the medical inspectors, and the city health officer, Dr. W. E. Hibbett, a decision was made that the situation in the city did not warrant closing its schools, as it was believed, wrongly as it turned out, that the crest of the epidemic wave had been reached. As a preventive measure, however, individual drinking cups were issued to the pupils, and every suspected case was to be sent home.

Although there was apparently a tendency on the part of some, including some doctors,⁸ to exaggerate the situation, we have the word of those who survived the epidemic and who are still with us that everyone was frightened. I have seen or heard no better description of the public mentality of the time than that written by a physician in Oliver Springs, Tenn., in an article entitled "Spanish Flu," which appeared in the *Journal of the Tennessee Medical Association* in December, 1918.⁹ It follows:

Spanish Flu

Give us another war with Germany, Mexico, and all the other heathenish countries in preference to another blast of this most distressing flu. The family of orphans, the lone widow, the cattle at the barn, with no one to feed; the plow standing in the field, rusting; the corn not gathered, and the general panorama of desolation viewed through tear-dimmed eyes, usher to our senses an observation that a great, merciless juggernaut has rolled over the land and left weeping and wailing in its path. Like a hideous monster, he went his way, and none could hinder. With a slight blink at the real old and the real young, he flung his javelin at the robust, middle-aged manhood and womanhood of the land, with a decided preference for the women in travail. The well-to-do were not exempt; while the ones in poor

circumstance and in uncomfortable dwellings possibly suffered most, it was not uncommon to see the white casket trimmed in velvet going into the cemetery along with the plain, cheap coffin of wood. A perilous time, and not quite over yet. The man who dug his neighbor's grave today might head the funeral procession next week. No telling who would be next.

In an effort at humor, the *Tennessean*, in the article reporting the closing of schools and places of amusements, said:

Pool Rooms Closed

Devotees of the ivories and the green cloth and the large number of frequenters who make billiard rooms their headquarters were very much grieved Monday when they showed up as usual and found the closed sign staring them in the face. The places where the wielders of the cues were wont to display their skill in executing apparently impossible shots and the equally dexterous youths who gave exhibitions of driving the ivories into the pockets presented morgue-like aspects, and former patrons were in moods to act as pallbearers at the obsequies. As a matter of fact the proprietors of those places were hard hit by the closing order. As a rule their places are located in the most desirable places in order to cater to the better element of patrons, and as a result rents, licenses, and other essentials are high. To remain closed for any length of time with present expenses continuing and nothing coming in means ruin for many of those who have not laid up a bank roll during the fat years.

That evening, Tuesday, Oct. 8, the *Nashville Banner* reported that the city schools had quietly closed their doors at noon "in order to prevent the spread of the now prevalent disease, Spanish influenza." This occurred, without a formal order from the health department, following a conference between the superintendent of schools, H. C. Weber, the health officer, Dr. W. E. Hibbett, and Capt. Derivaux. At the same time they requested ministers of the city to hold no more services in any of the churches until dangers of contracting the disease had abated, and ordered the officials of the Nashville Street Railway and Light Co. to run their cars with the windows open and to leave them open at night when they were taken to the barns, as "air, and air in abundance is one of the greatest preventives of the disease." It was thought these instructions and requests if followed would assist the department in handling the epidemic. No quarantine was ever issued, because the health authorities realized the danger of exposure was so great generally that to quarantine cases was next to impossible and of no value.

A quarantine was, however, imposed by fright.

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Entire families were isolated by their neighbors, who refused to come to their aid even when no family member remained able to minister to the others. One physician reported having attended the father in a family of 11, the last to become ill, who when asked who would give the medicine, answered simply, "I don't know." Without the constant ministrations of the public health nurses and the fearless and dedicated volunteers from the Red Cross, the Centennial Club and the Nashville Golf and Country Club, the death toll would doubtless have been much greater. It is also undoubtedly true that the decision of Dr. Derivaux not to establish emergency hospitals, but to treat all but the pneumonia cases at home, saved a great many lives as it prevented exposure of many of the influenza patients to bacterial pneumonia.

As occasionally happens, the passage of time shows humor in situations which were dead serious. Dr. E. L. Bishop, physician in charge of rural sanitation for the state board of health, issued a statement concerning the manner in which influenza is transmitted and means to be taken to prevent its spread. After stating that the disease is spread by infected individuals through droplets from the nose or throat by "laughing, coughing, sneezing, loud talking, or any other act of forceable expiration," or by contact with articles contaminated by infected individuals, he went on to say, "promiscuous kissing and especially that of the 'nonessential' variety, is to be most forceably condemned. What right have you to impose the kiss of infection, which may truly be the kiss of death, upon a helpless unsuspecting infant, or indeed on any other person."

The powder plant, which was not uniformly popular in Nashville, was having its problems with propagandists, who had taken advantage of the death of a neighbor to start a rumor that the disease was not influenza at all but the black death, and that physicians were powerless to stop it. This rumor was having a bad effect on hiring labor and on Monday officers had been sent to East Nashville to arrest the propagandists. On Tuesday, Oct. 8, Dr. Olin West, secretary of the state board of health, and Dr. Derivaux, went to investigate the general health and sanitary conditions at the plant, and a newspaper account made the statement that "reports in circulation in the city, circulated by prominent persons, have been greatly exaggerated as to

influenza conditions at the plant, the number and severity of the cases, and the number of deaths. The physicians at the plant and the public health representatives rendered exceptional services, says Dr. West, and considering the large number of persons at the plant the disease has not been as widespread as in some other places."

In mid-August, flushing of the streets to remove filth had been discontinued by the board of city commissioners because of the scarcity of water owing to repairs in progress to one basin of the reservoir. With the accumulation of filth, and the concomitant rise in the number of cases of influenza, the repairs on the reservoir having been completed, the commissioners signed an order on Sept. 15 directing the resumption of the flushing. To save money, the department of sanitation had neglected this duty, and the *Nashville Tennessean* and the *Evening American* took it upon themselves to start a crusade to get the job done.

By Oct. 11, with the epidemic at its height, the streets were still not being flushed, and a large tabloid appeared in the center of the front page of the *Tennessean*, which stated:

Flush The Streets

An outraged public demands the flushing of the downtown streets and sewers—AND THEY DEMAND IT NOW.

Personal likes and dislikes, political moves to benefit political futures, must be cast aside. The cry today is for action.

God pity the man who, in the midst of a scourge, can't view things from other than a selfish standpoint.

The *Tennessean* calls upon the city commissioners to lay aside their differences—AND DO.

This is not the time to discuss negligence or failure to perform duty, be it right or wrong.

THE PUBLIC KNOWS THE STREETS OF NASHVILLE NEED FLUSHING, AND DEMAND THEY BE FLUSHED WITHOUT FURTHER QUIBBLING.

The *Tennessean* is in receipt of a long communication from one of the commissioners, explaining and elucidating, asking that it be published. The *Tennessean* does not think the people of Nashville care a whoop at this time for explanations—but the *Tennessean* does know THAT THE PEOPLE OF NASHVILLE WANT THE FILTH AND ACCUMULATED DIRT OF SIX WEEKS STANDING cleared from the streets—and, once again, calls upon the city commissioners to DO THEIR DUTY.

FLUSH THE STREETS, AND FLUSH THEM IMMEDIATELY.

Accompanying this tabloid was a story entitled: "Dirt, Disease, Danger." which stated:

Dirt, Disease, Danger

No one who has walked the streets of Nashville during the past few months has failed to note the filthy and unsanitary conditions in the city. There has been a general disposition to make all due allowance for the money, the scarcity of labor, the increasing population, and the need for economy in water, but in the present epidemic, it is impossible to ignore the filth. The danger point has been reached and the policy of toleration has reached its limitation.

The connection between dirt and disease is too firmly established in modern science for the filth of Nashville streets to be longer endured in the present state of the public health. There is no use to urge precaution and care upon the people and to continue to permit the filthy accumulation on the city streets. The sidewalks, gutters, and highways are littered with papers, fruit-peelings and trash and dirt of all kinds to the extent of indecency, disgrace, and peril to health. These streets must be cleansed and some effort must be made to maintain proper sanitary conditions in Nashville.

This epidemic will pass, but this does not mean that the city is safe from all danger of disease. Eternal vigilance is the price of municipal health in every growing city, and Nashville owes that much to her population, new and old. Greater Nashville needs greater care and attention. The city authorities must clean up.

The stories finally gained the desired results, though whether from the newspaper's reporting or the fear of the flu would be difficult to say. In any event, on Oct. 12 the *Tennessean* carried a story which said "The Nashville *Tennessean* and the *Evening American* won a great battle for Nashville. Steps taken Friday afternoon insure the flushing of the streets and the abolition of the filth which has been accumulating for ten weeks past on the city streets."

In spite of the many modern medical advances, the treatment of flu is pretty much unchanged 60 years later. Then as now, treatment for the flu itself was supportive, and the following story from the *Nashville Banner* for Oct. 10 is an interesting and humorous sidelight.

Dr. Hibbett A Very Popular Man

Being a vocalist is not usually rated as one of the essential acquirements of a physician; but if ever anybody was in position to feel occasion for singing that good old song, "They're After Me," it is Dr. W. E. Hibbett, city health officer of Nashville. They've been after him ever since Judge J. D. B. DeBow of the Criminal Court issued his famous order releasing for prescription use in fighting the influenza epidemic a portion of the captured liquor stored away in the police station.

The report that the fountain of health and felicity was being opened started a drive on the office of the city health department, such as would have stampeded a whole German army had it been directed toward Berlin. The strait and narrow doorway proved altogether too contracted to admit the stricken ones as fast as they came. Ignorant of the fact that Dr. Hibbett himself does not issue prescriptions, the multitudes groping in the darkness of despair thought they beheld a gleam of light, and they hurried to bask in its effulgence. Every forlorn creature who could fool the flu-germs scratching around in the dust of his throat hastened to the new beacon of light and liberty. Every lusty specimen who could tell of a sick wife or child at home joined in the headlong charge.

Dr. Hibbett, though something of an athlete, was helpless in the hands of his assailants. If he tried to answer the telephone some wretched victim of "the epidemic"—whatever it was—would drag him away in order to implore quick relief. If the health officer sought to hear a report or give instruction to one of his nurses some eager suppliant would be clutching at his other shoulder, and a third perhaps grasping his hands.

They literally thronged the office and overwhelmed the luckless physician. Business was halted—but there was no halt in the tramp, tramp, tramp of the boys marching up the steps to the office. And so, in order to save himself from being pulled to bits, and to permit those having proper business with the department to get an opportunity to transact it, Dr. Hibbett selected a muscular guard to stand at the foot of his stairs and challenge all comers. If they are on an errand properly requiring the attention of the health officer, they are admitted to Dr. Hibbett's quarters, but the suckers after the nearly extinct liquor are informed that only if they have a proper prescription from a certified physician will they be able to obtain it . . . [newspaper account illegible]

The epidemic reached its peak on Oct. 11, when 29 people died, though deaths remained in the double figures from Oct. 6-23 (Table 1). For statistical purposes the epidemic is considered to have lasted until Nov. 15, but by Oct. 15 the city health officer had reported the number of cases materially declining judging from the decrease in calls for aid from his department. In addition, private physicians had begun to offer their assistance, saying "their demand for services had decreased until they have some time to spare for emergency work. Most of the drug stores also report a diminution in the rush of prescription work which almost swamped them for some days past." By Nov. 1, the situation was such that schools and places of amusement were again opened, so that when the long World War ended some ten days later, Nashville was able to celebrate a double armistice.

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Nashville was apparently not much affected by the third wave of the epidemic in the early months of 1919, and there appears to have been only sporadic cases, with occasional deaths, unlike many areas of the country where the epidemic was severe. The optimism of mid-November appears to have been justified, largely due, as Derivaux points out in the conclusions of his paper, not to "measures to prevent spread," which he believed to be demonstrably futile, but to early detection of cases, with extension of relief to the ill, and the organization of the help service to produce systematic and rapid transportation. He also believed, apparently justifiably, hospitalization or congregation of cases in large numbers not to be in the best interest of the ill, and wherever possible they should be treated at home.

Conclusions

1. Considering available newspaper and medical records, "old-timers" appear to have an exaggerated idea of the severity of the epidemic, probably based on the fact that

a. one person in every 300 or so died, so that everyone knew one or more of the dead;

b. a considerable number of prominent citizens, including doctors, died;

c. one person in three or four was sick, and everyone was fearful of dying; and

d. coming as it did with the maximum war effort, the epidemic seemed too much to bear.

2. The possibility must be considered that for

reasons of wartime propaganda and morale, contemporary news and medical accounts may have played down the severity of the epidemic, so that in fact the truth of the epidemic's severity probably lies somewhere between that contained in the records and that remembered by the "old-timers."

3. The epidemic was indeed severe, but not compared to

a. some other epidemics (the 1873 cholera epidemic in Nashville and the 1878 yellow fever epidemic in Memphis);

b. the influenza epidemic in surrounding communities, where help was less well organized (much credit for the palliation of the epidemic in Nashville belongs to the Red Cross, the public health nurses, and the volunteers from the various civic organizations); and

c. the influenza epidemic in other cities, in some of which the mortality rate was more than twice what it was in Nashville (Table 5).

4. Medically speaking, we are only slightly better off in our relationship to influenza than the world was in 1918. Our advantage is in the possibility of treatment of complications and in the production of artificial immunity, though the organism continues to keep such programs off balance by frequent minor and occasional major immunologic shifts.

5. Now, as then, measures to prevent spread, such as quarantine, are essentially worthless, as infected individuals are asymptomatic carriers for several days prior to becoming clinically ill. The only way to avoid contact with influenza is to avoid all contact with all people.

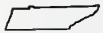
6. It is fortunate for mankind that influenza is essentially a mild, self-limiting disease. 

TABLE 5

DEATHS AMONG ALL AGES IN A NUMBER OF TYPICAL CITIES

City	Population	Deaths Influenza, Pneumonia	Rate Per 1,000
Milwaukee	453,381	614	1.4
Indianapolis	289,577	427	1.5
Los Angeles	568,495	1,214	2.1
Louisville	242,707	610	2.5
New York	5,737,492	19,357	3.4
Providence	263,613	994	3.8
Boston	785,245	4,355	5.5
Baltimore	599,653	3,685	6.1
Philadelphia	1,761,371	12,665	7.2
Nashville	155,000	468	3.0

Taken from U. S. Census reports up to November 9, 1918.

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Mediastinoscopy: A Personal Series And Literature Review

ROBERT W. IKARD, M.D.

Introduction

Since its introduction by Carlens in 1959,¹ mediastinoscopy has become an accepted method for evaluating the upper, middle, and posterior mediastinum. The procedure logically evolved from prescalene fatpad biopsy.^{2,3} Its technique,⁴ applicability,⁵ and complications⁶ have been reported.

A personal series of 100 mediastinoscopies is presented. Additionally, a review of published reports on the subject is made, thereby attempting to clarify the most appropriate application of mediastinoscopy.

Personal Series

Between November, 1971, and October, 1977, I performed 100 mediastinoscopies, leading to a tissue diagnosis in 67 cases. There were 50 cases of lung carcinoma, and diagnostic material was obtained in 37 of these. Eleven of 13 cancer patients with normal findings at mediastinoscopy underwent exploratory thoracotomy. Six of these had pulmonary resection. Two lesions were not removed because a pneumonectomy would have been required, and it was felt the patients could not tolerate such an extensive operation. Three lesions were unresectable, two of them located in the left upper lobe, the other encircling the right main bronchus. The resectability rate of those explored was 72.7% (8 of 11).

Other malignancies diagnosed include four lymphomas, three metastatic breast carcinomas, one metastatic prostatic carcinoma, and one leukemia.

Granulomatous disease was diagnosed in 21 cases, 15 of them showing noncaseating granulomata, or sarcoidosis.

Four mediastinal tumors not diagnosed by mediastinoscopy were subsequently resected. These included a dermoid, a bronchogenic cyst, a mediastinal goiter, and a solitary Hodgkin's tumor. Other diseases diagnosed by thoracotomy following negative mediastinoscopy included two resectable granulomatous lesions, a nonresectable seminoma, and two cases of nonspecific inflammatory lung disease.

There were six complications: one wound infection, two pneumothoraces, and three recurrent nerve injuries. All the paralyzed vocal cords were on the left side. One required teflon injection. Neither pneumothorax was major. There were no mortalities.

When the eight cases of lung carcinoma which were resectable for potential cure are added to the 67 in which a tissue diagnosis was made, the management of at least 75% of cases was benefited by mediastinoscopy.

Literature Review

Comprehensive reviews of mediastinoscopy were previously reported by Ashbaugh⁷ (9,543 cases) and Foster et al⁶ (3,742 cases). Including the 100 cases presented here, 7,426 cases have been reported subsequent to the latter series.⁸⁻⁵³

Among those authors discussing complications, the morbidity rate was 1.76% (131 of 5,061 cases).^{10-17,19-22,24,25,28,29,31,33,35-37,39,40,42-44,46-50,52,53} Three deaths were reported, a mortality rate of 0.059%.^{10,11,32} The most frequent complications were hemorrhage, pneumothorax, and recurrent nerve injury (Table 1). Less common problems included anesthetic complications,¹⁰ tumor implantation in the operative wound,^{28,35} chylothorax,^{11,46} and esophageal perforation.¹³

The diagnostic rate with mediastinoscopy ranged from 26%³⁶ to 95%,³⁴ the wide range being due to variation in procedure application. Again including the present series, diagnostic

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rate in this literature review was 50.4% (2,946 of 5,842 cases).^{8,11-18,20-22,25,26,28,29,31-45,47-49,51,52}

When mediastinal metastases were seen as contraindications to pulmonary resection for cure of carcinoma, high resectability rates were obtained in patients undergoing thoracotomy. With a range of 50%⁴³ to 100%,³⁷ the average "resectable at thoracotomy" rate in this compilation was 86.5% (1,222 of 1,403 cases).^{11,13,15-17,20,24,28,31,32,35-37,39,41-43,47,51,52}

Discussion

Mediastinoscopy has been extensively used for about a decade. Though initially there was concern that the procedure was prohibitively dangerous, it is clearly a safe procedure when done by the experienced examiner. This literature analysis showed a morbidity rate of 1.76%, a figure similar to that in reviews by Ashbaugh⁷ and Foster et al,⁶ and mortality rates in all three series were less than 0.1% (Table 2). The spectrum of complications has not changed significantly since previous reports. Excessive bleeding is the most common, usually resulting from biopsy of the azygous vein, a bronchial artery,⁶ a pulmonary artery,²⁹ the aorta,¹¹ or the myocardium.⁴⁷ Pneumothorax¹⁰ and recurrent nerve injury⁵³ probably occur more often than is reported. Most pneumothoraces are small and

occur from disruption of the parietal rather than visceral pleura. They are, therefore, usually resorbed without requiring tube thoracostomy. The left side is usually spared because the descending aorta is between the trachea and the pleura. Most recurrent nerve injuries occur on the left because of its location in the tracheoesophageal groove, making it vulnerable to damage by biopsy forceps or cautery.⁵³

There has been a growing recognition of anesthesia complications peculiar to mediastinoscopy. In addition to the risk of cardiopulmonary complications inherent in any operative procedure done on sick or elderly patients, cerebrovascular and monitoring difficulties can arise because of contiguity of the mediastinoscope to the innominate artery. Monitoring of the right arm pulse is unreliable, as it may intermittently disappear due to pressure from the mediastinoscope.³⁰ Of more concern is the possibility of stroke due to such compression in a patient with compromised extracranial cerebral vasculature.⁵⁴

The anatomical relationships of middle and posterior mediastinal structures are now better understood because of studies undertaken since the advent of mediastinoscopy. The average tracheal length is around 11 cm, and the average distance between the cricoid and carina is between 11 and 13 cm.^{6,55} Cadaver dissections have reaffirmed the accessibility and vulnerability of such structures as the left recurrent nerve, pulmonary arteries, azygous vein, and esophagus.⁵⁵

Mast⁵⁵ showed there are more than 30 lymph nodes available for biopsy in the standard mediastinoscopy field. In addition to its proven clinical efficacy, this provides an anatomical basis for the procedure. However, left upper lobe lesions are not reliably evaluated by mediastinoscopy, because metastases from this lobe usually go first to node groups in the anterior mediastinum.¹⁴ Jolly et al⁵⁶ obtained positive mediastinoscopy biopsies in 39% of right lung and only 19% on left lung cancers in their series. Because of this relative unreliability,^{20,36,43,44} many recommend parasternal mediastinotomy instead of mediastinoscopy to evaluate left upper lobe lesions.^{41,56,57}

Mediastinoscopy is reliable for diagnosing many nonmalignant diseases. Twenty-one percent of the present series had granulomatous disease, 15 of them sarcoidosis, a disease more readily diagnosed by mediastinoscopy than by any other technique, including scalene node biopsy.^{7,50,54} In

TABLE 1
MEDIASTINOSCOPY MORBIDITY
LITERATURE REVIEW
(5061 cases)

Hemorrhage	45
Pneumothorax	22
Recurrent Nerve Injury	21
Wound Infection	17
Anesthesia Complications	12
Tumor Implantation	6
Miscellaneous	8
Chylothorax	2
Subcutaneous Emphysema	2
Esophageal Perforation	2
Hematoma	1
Postop Tracheal Collapse	1

Compilation of mediastinoscopy complications, since Foster.⁶

TABLE 2
COMPARISON OF LITERATURE REVIEWS OF
MEDIASTINOSCOPY

Author	Morbidity	Mortality	Diagnostic Rate
Ashbaugh ⁷	1.5%	0.09%	37.9%
Foster ⁶	1.6%	0.08%	—
Ikard	1.76%	0.06%	50.4%

a group of patients from a tuberculosis sanatorium who had abnormal chest films and uncertain diagnoses, Mikhail and Mitchell³⁴ were able to diagnose 99% of granulomatous disease cases by mediastinoscopy.

Nonpulmonary malignancies are often diagnosed by mediastinoscopy. Lymphomata with mediastinal node involvement are especially accessible,⁵ and nonpulmonary carcinoma metastases frequently present as mediastinal roentgenographic abnormalities. In the present series mediastinal metastases from prostate and breast were identified. Tissue from breast cancer metastases can be valuable to measure estrogen receptor activity as well as to establish a diagnosis. The efficacy of mediastinoscopy in this situation can be suggested by positive gallium scintigraphy, even when there is no unusual hilar adenopathy.³⁸ Murray et al⁵⁸ have reviewed the role of mediastinoscopy in determining esophageal carcinoma operability, the procedure being most helpful for middle and upper third lesions. Tucker⁵⁹ similarly felt it valuable in the assessment of laryngeal carcinoma.

The most frequent use of mediastinoscopy remains the evaluation of patients with pulmonary malignancy, to obtain diagnosis or to assess curability. Most physicians consider the presence of mediastinal metastases a contraindication to attempting resection, but when the area was made more accessible by mediastinoscopy, most series showed a marked decrease in unresectable cases. Delarue and Strasberg⁶⁰ reported a drop in unresectable cases to 6% from as high as 43%, and Murray et al³⁶ increased the resectability rate at their institution to 85% from 65%. The 86.5% resectability rate in the present literature review is impressively high.

The five-year survival rate in series in which resection is attempted following a normal mediastinoscopy is relatively encouraging. Viikari et al⁵¹ reported 34.6% five-year survivals in such patients, and in those who at thoracotomy were found to have no mediastinal metastases (i.e., the mediastinoscopy was not falsely negative), the survival rate was 42.7%. Kirschner²⁸ reported a 93% resectability rate and a five-year survival of 40% in 143 patients having normal mediastinoscopy.

The presence of mediastinal metastases usually connotes a grave prognosis. Among 75 patients with positive mediastinoscopy, Fosburg et al¹⁸ reported only one which lived more than three

years after diagnosis. Seventeen patients with known mediastinal metastases in this series underwent thoracotomy, and six had resectable lesions. There was one operative death, and all the patients with positive mediastinoscopy who underwent thoracotomy were dead within 24 months. Inberg et al²⁶ had only one of 14 patients who underwent resection *in spite of* mediastinal metastases live longer than two years, a therapeutic result similar to the nonoperated patients in that series. In Gibbons' study,²² no patient with a positive mediastinoscopic biopsy lived more than 2½ years, and all but three (of 28) were dead within one year. The mean survival rate of those with positive biopsies (all of whom underwent thoracotomy) was seven months. Morton⁶¹ reported a mean survival of four months in his patients with mediastinal metastases.

A possible exception to this gloomy prognosis is the presence of *intranodal*, ipsilateral metastasis of epidermoid carcinoma. Pearson et al⁴¹ projected a five-year survival of 20% of 26 such patients who underwent surgery followed by cobalt therapy. Others have had limited therapeutic success in this situation and recommend attempting resection,^{16,36} but the consensus is that the presence of mediastinal metastases of any other cell type or of extranodal or contralateral metastases is a contraindication to thoracotomy. In the best of hands, resection done for patients with mediastinal node involvement obtains a five-year cure rate that is almost the same as operative mortality.⁶²

Because mediastinal metastases do represent such a bad prognosis, should mediastinoscopy be a routine part of the evaluation of lung cancer patients? Sealy⁵⁷ is skeptical of this practice. Because of the additional expense and potential morbidity, he felt it should be done only in patients with enlarged mediastinal or hilar nodes. Some feel it should be done because of the very low morbidity and the consistent "positive" mediastinoscopy rate of 30% to 40% in those groups using it routinely.^{16,25} This diagnostic yield apparently holds true even in patients with radiologically normal mediastinums.²⁰

Unnecessary mediastinoscopy can best be avoided by requiring certain clinical criteria for performing the procedure. Acosta and Manfredi⁸ observed that when there was central tumor location, mediastinal nodal enlargement, or laryngeal nerve involvement, the percentage of positive biopsy was very high, 81% in their series. Others have used similar criteria in selecting patients for

mediastinoscopy.¹¹ In cases of pulmonary nodules ("coin lesions"), mediastinal biopsy is usually not indicated,⁵² although mediastinal metastases can be associated with peripheral lesions. Reyners⁶³ had 7% positive mediastinoscopy biopsies in his group of pulmonary nodules. Abnormal mediastinal tomography can be helpful here, as there is a 75% correlation between abnormal tomography and positive mediastinoscopy,⁶⁴ suggesting the routine use of tomography in this clinical situation.⁶⁰

The diagnostic rate in reported series of mediastinoscopy has risen from 37.9% to 50.4% since Ashbaugh's⁷ review (Table 2), the reasons for this probably being threefold: (1) Increased experience has inevitably made for better proficiency. (2) Some groups have gone beyond the former anatomic barriers of the procedure, looking into the pleural cavities and the anterior and extreme posterior mediastinum.^{40,65} Though more dangerous and not generally accepted, this extension of the technique makes for higher diagnostic yields. (3) Mediastinoscopy is apparently being used with more discrimination, in contrast to earlier years when its role was less understood.

Summary and Conclusions

A personal series of 100 mediastinoscopies is presented. Diagnosis was made in 67 cases, and the results of study were helpful in 75. There were six nonfatal complications.

Literature review shows mediastinoscopy to be a safe procedure with very low morbidity (less than 1.8%) and mortality (less than 0.01%) rates. Diagnostic tissue was obtained in one half of cases reviewed, a higher yield than previously reported. The applicability spectrum in diagnosing benign and malignant (primary and metastatic) disease is reviewed.

An unresolved problem is the proper use of mediastinoscopy in cases of lung malignancy. The cure rate for patients with mediastinal metastases remains very low. Resectability and cure rates are encouraging when preceded by "negative" mediastinoscopy. In those cases judged by mediastinoscopy to be incurable, unnecessary expense, suffering, and mortality are avoided. Mediastinoscopy should be selectively applied, the choice being based on clinical and radiographic criteria.

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Radiologic Diagnostic Clues in Pulmonary Infections

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With a variety of bacterial, viral and protozoan organisms causing a vast array of pulmonary infections, it is apparent that the chest roentgenogram can only provide clues as to the specific causative agent. By looking at the underlying pathologic process in each specific disease, and then comparing it with the chest roentgenogram, certain general conclusions can be obtained for classifying pulmonary diseases into groups. An exudative pneumonia, which pours fluid into the alveoli, is seen on the chest roentgenogram as an alveolar, parenchymal infiltrate. Certain organisms have a predilection for certain areas of the lung, e.g., Gram-negative organisms invade the lower lobes, and tuberculosis involves the apices of the lungs. Besides the pattern of involvement, other factors which can be delineated include distribution, degree of cavitation, presence of pleural effusion, hilar adenopathy, degree of calcification, presence of empyema, and degree of residual fibrosis.

The most characteristic findings on x-ray of the chest are those produced by Gram-negative organisms, especially *Klebsiella* (Friedlander's) and *Pseudomonas*. *Klebsiella* is characterized by dense lobar consolidation of the upper lobes, early abscess formation, loss of lung volume, empyema, and by a specific "bulging of fissures" (Fig. 1), assumed to be caused by swelling of the lobes secondary to heavy consolidation and voluminous edema. This roentgenographic sign, however, is not pathognomonic and has been seen in *Pseudomonas* and *Staphylococcus* pulmonary infections. *Klebsiella* pneumonia is commonly seen in alcoholics and diabetics. Thus, right upper lobe consolidation in an alcoholic would suggest *Klebsiella*.

Pseudomonas infection is characterized by

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diffuse alveolar infiltrations, with unusually rapid progression to cavitation. As with other Gram-negative organisms there is commonly a predilection for the lower lobes, and pleural effusion is common. The result of this necrotizing, cavitating process is the "sponge lung," produced by small areas of cavitation within homogenous lung parenchyma (Table 1). *Pseudomonas* pneumonia is commonly seen in patients with leukemia on immunosuppressive therapy, but can also be seen in the debilitated nonleukemic patient.¹

Other Gram-negative organisms tend to have multiple lobe involvement, usually involving the lower lobes. Involvement of the upper lobes is distinctly uncommon; 66% of Gram-negative pneumonias are associated with pleural effusions



Figure 1. Chest roentgenogram showing dense lobar consolidation of upper lobes, early abscess formation, loss of lung volume, empyema, and specific "bulging of fissures," characteristic of *Klebsiella*.

RADIOLOGY IN PNEUMONIA/Hedlund

or with empyema. The differential diagnosis of a cavitating pneumonia would have to include *Pseudomonas*, *E. Coli*, *Klebsiella*, *Proteus*, in addition to *Staphylococcus* and anaerobes.

Staphylococcal pneumonia. *S. aureus* is the only Gram-positive bacterium with a distinctive radiologic sign. Most characteristic are patchy, migratory infiltrates with early complications of abscess formation, pleural effusion, empyema and

TABLE 1
RADIOGRAPHIC FEATURES OF
PNEUMONIA CAUSED BY
PSEUDOMONAS AERUGINOSA*

	Number of Patients
Distribution	
Lower lobe involvement	9
Both lower lobes	6
Left lower lobe	3
Lower lobe & upper or middle lobe involvement	8
Upper lobe involvement	2
Right upper lobe	1
Left upper lobe	1
Pattern of Parenchymal Involvement	
Alveolar	13
Interstitial	1
Mixed	5
Broncholobular	2
Cavitation	16
1 cm diameter only	2
1 cm diameter & 1-3 cm	8
1 cm diameter & 3 cm	1
1 cm diameter & 1-3 cm & 3 cm	3
1-3 cm diameter only	2
Pleural Effusion	16
Minimal	12
Moderate	3
Massive	1

* From Rose et al.¹

TABLE 2
X-RAY FINDINGS IN 67 PATIENTS WITH
HISTOPLASMOSIS*

	Number	Percent
Lung Infiltrates		
Single	2	3
Miliary	2	3
Perihilar	10	15
Bronchopneumonic	4	6
Lung Calcifications		
Miliary	3	4
Hilar	32	50
Peripheral	8	12
Pneumonic Consolidation	4	6
Hilar Adenopathy	26	40
Splenic Calcifications	0	0

* From Schwarz.²

bronchopleural fistulas. Abscess formation, while rarely produced by other Gram-positive organisms is typical of staphylococcal pneumonia. The differential diagnosis would have to be the same as that of the Gram-negative pneumonias.

Mycoplasma pneumonia is most characteristic, in that it reveals a pattern of progression that is peculiar to it. Early, an indistinct, ill-defined interstitial pattern similar to viral infections is seen. This progresses to a lobar or sublobar consolidation with accumulation of edema fluid, a picture indistinguishable from bacterial pneumonia. The infection is typically unilateral and confined to one lobe. Interestingly, radiographic findings may lag behind the clinical symptoms by several days in mycoplasma pneumonia. Also, the roentgenographic findings may be out of proportion to the severity of the clinical presentation. Recently, a wide variety of pulmonary manifestations have been described in mycoplasma pneumonia, including massive pleural effusion, but this is very rare.

Viral pneumonias usually produce an x-ray appearance that is characteristically a diffuse interstitial pattern, without evidence of cavitation or pleural effusion.

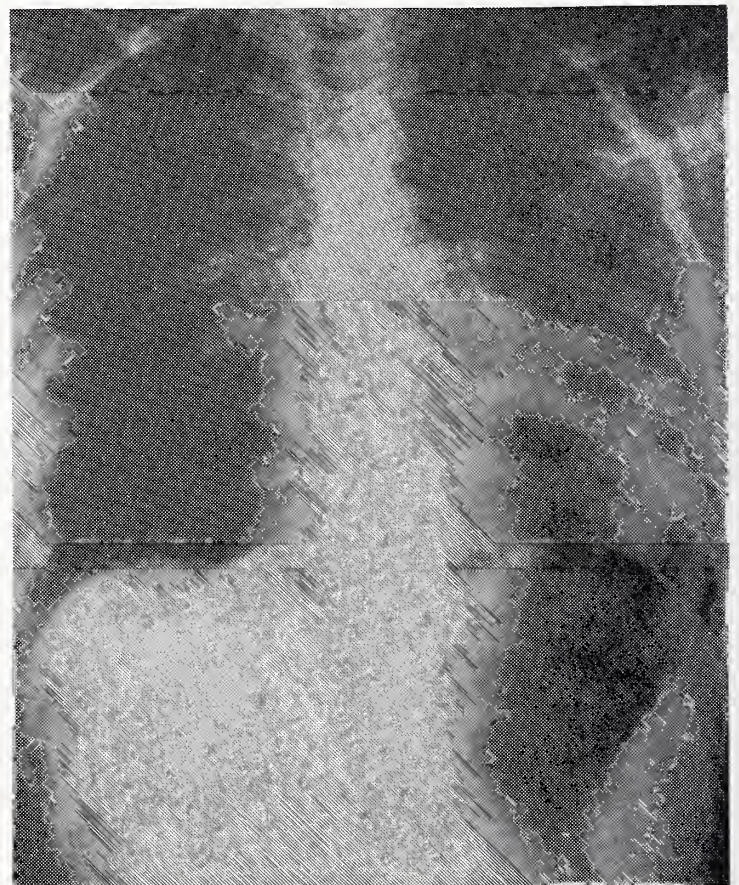


Figure 2. Chest roentgenogram showing diffuse, bilateral, alveolar infiltrates of lower lobes, starting in perihilar area and fanning out to involve entire lung fields, characteristic of pneumocystis pneumonia.

Varicella pneumonia presents with small, discrete, alveolar infiltrates which are scattered throughout both lung fields. Hilar adenopathy may be present. Documentation of previous varicella pneumonia is the finding of heavily widespread pneumonic calcification in a patient with known prior varicella pneumonia.

Parasitic infestation of the lung can produce very distinctive radiographic findings.

Pneumocystis pneumonia presents with diffuse, bilateral, alveolar infiltrates involving mainly the lower lobes (Fig. 2). These infiltrates start in the perihilar area and progressively fan out to involve the entire lung fields. Significantly, this disease lacks pleural effusion or hilar nodes. It mimics congestive heart failure and uremic lung on the chest film. In a compromised host, mainly a renal transplant patient, this radiologic picture, associated with the clinical findings of severe dyspnea, cyanosis, hypoxemia and a lack of chest auscultatory findings should suggest *Pneumocystis pneumonia*.

Pulmonary amoebic infection almost always presents as a right lung abscess, usually as the result of direct extension from liver abscess. Massive pleural effusion and bronchial erosion are common. Characteristically, this effusion is chocolate-like in appearance.



Figure 3. Chest roentgenogram showing chronic fibrosing and cavitating form of histoplasmosis.

Fungal pulmonary infections are quite variable with respect to their appearance on the chest roentgenogram. In general, they tend to mimic tuberculosis, in that fibronodular and cavitating lesions predominate, but there are some characteristics which are unique to certain of these organisms.

Common to histoplasmosis, coccidioidomycosis, blastomycosis, and aspergillosis is the presence of cavitation, hilar adenopathy, calcification, and pleural effusion. Primary pulmonary cryptococcosis, on the other hand, is not noted for cavitation or pleural involvement. In general, the fungal pulmonary infections tend to have two to four discrete clinical entities which include (1) an acute epidemic form with a hypersensitivity component, (2) a localized pneumonic form, (3) a chronic, fibrosing and cavitating form, and (4) disseminated or miliary disease.² The chronic fibrosing form of histoplasmosis is seen in Figure 3.

Thus, in the radiograph, these diseases closely mimic the appearance of tuberculosis. Most importantly, though, the radiographic changes produced by the various fungi are so variable and changing that generalizations as above are not that helpful (Table 2).²



Figure 4. Chest roentgenogram of actinomycosis showing lower lobe involvement with a necrotizing infiltrative pneumonia and direct extension from lung to pleura and chest wall, with resultant bone changes.

TABLE 3
CLASSIFICATION OF ORGANISMS

	Pattern	Distribution	Cavitation	Pleural Effusion	Hilar Nodes	Calcification	Empyema	Residual Fibrosis	Differential Diagnosis
<i>Klebsiella</i> (Friedlander's)	A	RUL	+++	++	0	0	+++	+	other Gram-staph, anaerobic lung abscess
<i>Pseudomonas</i> <i>Proteus</i> <i>E. coli</i>	A	BLL	+++	++	0	0	+++	+	same
<i>Staph. aureus</i>	A	BLL Patchy	++++	++	0	0	+++	+	Gram-anaerobic lung abscess
<i>Mycoplasma</i> (Eaton's)	M	LL Unilateral	0	+	0	0	0	0	parasitic viral pneumonia
Influenza	M	BLL (Lobar)	+	++	+	0	+	+	common bact. pneumonia
Varicella	A	Diffuse Scattered	0	+	++	++	0	+	parasitic other viral
Other Viruses	I	Diffuse	0	0	0	0	0	+	parasitic
<i>Pneumocystis</i>	A	Diffuse	0	0	0	0	0	++	congest. heart failure uremic lung
<i>Amoeba</i>	M (Abscess)	RLL	++++	++++	+	+	+++	0	anaerob. lung abscess Gram-pneum.
<i>Histoplasma</i>	M	Variable	++	+	+++	+++ I	+	++	other fungi tuberculosis
<i>Coccidioides</i>	M	BUL	++++ (thin wall)	+	+++	++	+	+	same
<i>Cryptococcus</i>	M	miliary nodular peribronc.	+	0	0	0	0	+	same
<i>Blastomyces</i>	M	Diffuse	++	+	++	++	+	+	same
<i>Actinomyces</i>	M	Diffuse (Dir. Exten.)	++	+	++	++	+	0	same

Frequency: 0—Rare
+—Seldom occurs
++—Common
Pattern: A—Alveolar I—Interstitial M—Mixed

Distribution: BBL—Both lower lobes
LUL—Left upper lobe
LL—Lower lobe
BUL—Both upper lobes
LLL—Left lower lobe
RUL—Right upper lobe
RLL—Right lower lobe

Actinomycosis, not a fungus but a bacterium, presents a picture of lower lobe involvement with a necrotizing infiltrative pneumonia, and can show direct extension from the lung to pleura and chest wall, with resultant bone changes on roentgenogram (Fig. 4).

Table 3 lists the various organisms and classifies them according to the above criteria.

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Acute Osteomyelitis Due to a Spore-Forming Anaerobe

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With the increasing awareness of the spectrum of infections caused by anaerobes and the improved techniques in anaerobic culturing that have focused attention on these organisms, a growing number of disorders are being recognized as due to anaerobes. Many "sterile abscesses" are now found to be anaerobic infections.

If anaerobes are to be cultured, specimens must be carefully collected and properly transported to the laboratory, where proper anaerobic conditions must be established. Subculturing of colonies must be carried out immediately after removal from the anaerobic environment.¹ Although nonsporulating anaerobes have been implicated in osteomyelitis² and septic arthritis³ (especially in the diabetic), anaerobes of the *Clostridium* group that form endospores and are catalase-negative have not been implicated in past reviews as an etiologic agent in acute osteomyelitis.⁴

The following brief summary is reported as a case of acute osteomyelitis due to *Clostridium paraputrificum*.

Case Report

An 8-month-old infant was seen two days prior to admission to the hospital with a history of having had an uncomplicated upper respiratory infection of several days' duration. Twelve hours prior to being seen she had developed fever and fussiness and had vomited one time. She did not use her left arm, which was held slightly flexed at the elbow. The parents stated that she had been playing rather roughly with older children the previous evening. Examination showed a fretful, ill-appearing infant with her left arm slightly flexed. The elbow showed no swelling, induration or heat, and it could be flexed gently without apparent pain. There was a right catarrhal otitis media. Her temperature was 104 F rectally. The remaining physical examination was negative. She was given 600,000 units of procaine penicillin IM and was started on amoxicillin 125 mg tid by mouth.

On reexamination the following morning the patient was afebrile, but her elbow showed some mild increase in heat along the lateral surface at the lower end of the humerus, an area of redness about 10 mm in size, and slight induration. She was again favoring the arm with a flexed position but exhibited no tenderness on palpa-

tion. An x-ray of the elbow showed no joint or bony changes.

On the evening prior to admission she had again become febrile and fussy. Examination on the day of admission showed that there was now more induration and heat, but the area of redness was the same. No swelling of the joint was noted. The arm was held flexed, and there was now definite point tenderness over the lower lateral humerus, with pain on motion of the elbow. There was no apparent pain to palpation along the remaining part of the humerus. Initial blood count was 17,600 WBC with 1% eosinophils, 9% stabs, 46% segs, 43% lymphocytes, and 1% monocytes. The hemoglobin was 11.2 gm, hematocrit 36%, and RBC 4.11. Cell indices were normal. Urinalysis was normal.

She was admitted to the hospital with the diagnosis of acute osteomyelitis of the humerus and was taken to the operating room where two blood cultures were drawn—one from the left femoral vein and one from the right internal jugular vein. Needle aspiration of the elbow produced only a drop of blood, and culture of this showed no growth. She was started on methicillin 500 mg q 6 hr IV.

Approximately 18 hours later both blood cultures showed heavy growth of a Gram-positive, large, non-motile anaerobic rod. This was later identified as being in the *Clostridium* group, but positive identification as *C. paraputrificum* could only be made in the Tennessee State Health Department's microbiology laboratory.

The following day the infant's appearance had improved. In view of the suspected anaerobic organism, she was also started on chloramphenicol 200 mg q 6 hr IV. During the first five hospital days her daily temperature ranged from 100 F in the morning to afternoon and evening elevations of 101-102 F. The acute inflammatory aspects of her arm improved, and by the fourth day after institution of intravenous therapy she was again using it without apparent pain. A repeat blood culture done on the second day of therapy showed no growth.

After the fifth hospital day she remained afebrile, without overt findings in the region of the elbow, and after the tenth hospital day intravenous therapy was discontinued. A repeat x-ray of the elbow on the day prior to discharge showed a minimal but definite cortical defect in the lateral epicondyle of the humerus adjacent to the capitulum that was felt to be consistent with a healing osteomyelitis.

Three months after discharge from the hospital the infant remains asymptomatic.

Discussion

Gorbach and Thadepalli⁵ recently reviewed clostridial infections in humans and evaluated 114 additional cases isolated during a 14-month period at Cook County Hospital in Chicago. A *Clostridium* was isolated from one case of neonatal septicemia, but more characteristically they

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were isolated from soft tissue abscesses. Nevertheless, there were 49 patients with positive blood cultures, of whom information was available on 29. Of these, 12 had soft tissue abscesses, while the others had in addition a spectrum of other illnesses in which the clostridia may have been playing a secondary role. It is clear, nonetheless, from their and other studies that the diagnosis of *Clostridium* septicemia is not uncommon when proper anaerobic techniques are employed. However, as pointed out by Wilson et al,⁶ Gram-positive spore-forming rods may not be uncommon contaminants. In their series of 1,368 positive blood cultures, 360 produced anaerobic bacteria. Of these, 12 were positive for Gram-positive spore-forming rods, although only six had evidence of clinical bacteremia.

In a prospective study Dunkle et al⁷ found an overall incidence of 0.75% positive anaerobic blood cultures from 5,734 specimens. Anaerobic bacteremia accounted for 5.8% of all clinically significant bacteremic episodes. A *Clostridium* species was isolated from only three of the 5,734 blood cultures.

The laboratory selection of the proper antibiotic for dealing with an anaerobic infection poses certain problems not encountered with aerobes in that the techniques for sensitivity testing are more difficult, and the time interval is such that this method is impractical for everyday hospital use.⁸

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Dornbusch et al⁹ have done excellent studies on antibiotics for use in *Clostridium* species infections. Chloramphenicol was uniformly active *in vitro*, as were lincomycin and clindamycin. Penicillin G has also been quite effective. Methicillin was continued after tentative identification of the anaerobe, and institution of chloramphenicol was begun because the response to therapy was indicative of general improvement in the patient's status.

Summary

A case of acute osteomyelitis associated with two positive blood cultures for *C. paraputrificum* has been presented, with a brief review of the role of anaerobes of the *Clostridium* group in infection.

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Glycosylated Hemoglobin: A New Approach to Diabetes Control

JOSEPH J. SANNELLA, M.D.

Until recently, the laboratory assessment of long-term diabetes control has suffered from the need to make assumptions. Frequent checks of urinary glucose excretion and/or blood sugar levels have only provided momentary "snapshots" of what glucose-insulin metabolism was doing on a given day and hour. On the basis of these "snapshots," modifications of caloric intake, physical activity or insulin dosage produce the appearance of more tidy control. In this, both doctor and patient feel some sense of accomplishment, the assumption being that tighter control at specified times is an indication that for the most part the patient is under better control. But what about the rest of the time? This has been dealt with by averaging glucose excretion and blood sugar levels before and after meals, in order to gain a broader view of control.

A new and better tool is now available, which measures long-term blood glucose regulation. It can be directly correlated with average blood glucose levels in the several weeks preceding analysis, and now the view is panoramic! The test measures hemoglobin A_{1c} (HbA_{1c}). Glycosylated hemoglobin or glycohemoglobin are other names commonly applied.

In 1968 Rahbar¹ reported finding HbA_{1c} in diabetics. At first, it was thought to represent a genetic marker,² but as methodologic improvements provided more sensitivity, the same hemoglobin A_{1c} could be found in normal individuals but in definitely smaller concentrations. Several groups of investigators³⁻⁵ have examined the genesis of this interesting substance and the following now seems certain:

1. Hemoglobin A_{1c} is a posttranslational modification of hemoglobin A, i.e., the freshly made red cell entering circulation has very little, if any, HbA_{1c}.

2. As the red cell ages, exposure of the hemoglobin A molecule to glucose causes a slow incorporation of glucose at the N terminal amino acid (valine) in an aldamine linkage.

3. This linkage (Schiff base) undergoes a rearrangement into a stable and irreversible ketoamine linkage (Amadori rearrangement).⁶

4. The reaction is nonenzymatic and its rate is directly proportional to the level of glucose present.

5. Older red blood cells contain the most glycosylated hemoglobin, since the process is continuous and irreversible. Therefore, any condition resulting in shortened red cell survival (hemolysis or bleeding) or transfusion would render the results invalid.

6. Normal children and adults show glycosylated hemoglobin levels up to about 6%. Diabetics may show two- or three-fold increases.

7. Other fast eluting hemoglobins on cation exchange resins are also increased in diabetics. These are hemoglobin A_{1a} and hemoglobin A_{1b}, apparently intermediate compounds leading to A_{1c} formation.

Koenig et al⁴ have shown that poorly controlled diabetics with elevated HbA_{1c} do indeed return to normal levels when good control is established and maintained for three weeks or more. Furthermore, they claim a direct linear relationship between the area under the glucose tolerance curve and the level of HbA_{1c} found. They also suggest that HbA_{1c} levels can be used to establish the diagnosis of diabetes because it is a true reflection of average blood sugar levels and identifies the persistently hyperglycemic patient.

The procedure uses EDTA whole blood. The patient need not be fasting. A fresh hemolysate is prepared and placed on chromatographic columns, and the hemoglobin fractions are eluted

Continued on page 287

From Clinical Laboratories of Nashville, 2525 Park Plaza, Nashville, TN 37203.

W. BARTON CAMPBELL, M.D.

An asymptomatic 33-year-old heavy equipment operator had an electrocardiogram carried out during a routine physical evaluation (Fig. 1). His height was 6'2", weight 197 lb, and blood pressure 140/96. He had multiple pigmented raised skin lesions on the trunk. Cardiovascular examination disclosed no abnormalities. An echocardiogram disclosed no abnormalities.

Discussion

This electrocardiogram displays sinus rhythm at a rate of 78 per minute. The PR interval is normal at 0.18 seconds. The P waves are minimally inverted in V₁. P wave morphology is otherwise felt to be within normal limits. The striking finding in the electrocardiogram is the notably rightward axis resulting in a deep wave in standard lead I. Although this may be normal in

standard lead III reveals these very early forces to be between 0 and 30°. The average frontal plane QRS forces are most nearly isoelectric to standard lead II at approximately 140°. Rightward deviation of QRS forces with normal initial QRS forces may represent right ventricular enlargement or posterior hemiblock. The lack of anterior force (R wave in V₁) with absence of echocardiogram or physical findings of right ventricular enlargement would seem to exclude this possibility as the cause of the clockwise rightward rotation of QRS forces.

The diagnosis of posterior hemiblock is congruent with the clockwise rightward rotation of QRS forces in this case. A small .02 second R

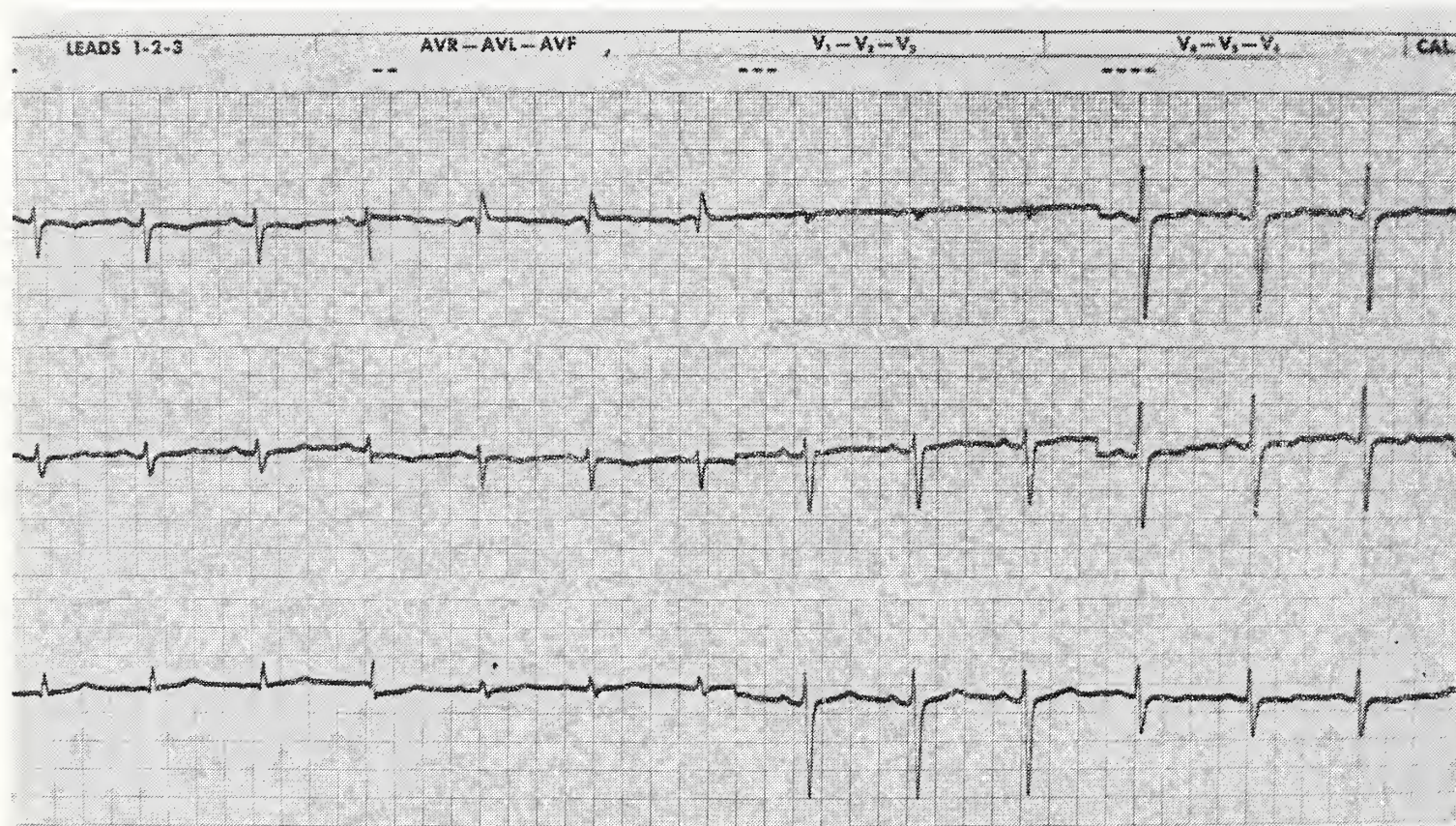


Figure 1

children or in people with an extremely asthenic habitus the axis is abnormally rightward for a man of mesomorphic body build. The early QRS forces are appropriately located in the left inferior quadrant with an R wave in I and AVF. The presence of a very small .02 second Q wave in

wave in AVL and small Q wave in III have been described in this situation. Some authors believe that a .02 second Q wave should also be present in AVF.¹ Interruption of the posterior radiation of the left bundle (posterior hemiblock) is encountered less commonly than other types of block. It is the impression of Rosenbaum² that a lower incidence of posterior hemiblock occurs

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because posterior radiation of the left bundle branch is the first group of fibers to leave the bundle of His; it is moderately short and thick, and is in the area of the heart which supplies the left ventricular inflow tract where blood flow is less turbulent; it also has a dual blood supply from anterior and posterior descending arteries in most cases.

It is of interest that this patient has multiple pigmented skin lesions. Electrocardiographic conduction abnormalities including posterior hemiblock have been described in patients with generalized lentigo.³ The skin lesions in this patient

resemble seborrheic keratoses. Thus, this patient would appear to represent an example of posterior hemiblock associated with nongeneralized lentigo.⁴

Final Diagnosis: (1) Posterior hemiblock with right axis deviation. (2) Nonspecific ST-T wave changes.

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Laboratory Medicine . . .

Continued from page 285

from the resin with buffers. The quantitation of each fraction is performed with spectrophotometry.

Glycohemoglobin testing is an important new test which will contribute greatly to the care of diabetics. Moreover, it is quite possible that other evidence of glycosylation of proteins and resulting disturbance of function will be found. We may gain new insights into the protean manifestations of this disease in the very near future.

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E. PAUL NANCE, M.D. and A. JAMES GERLOCK, JR., M.D.

A 19-year-old black woman presented to the gynecology clinic with a chief complaint of infertility. She had a history of pelvic inflammatory disease (PID). A hysterosalpingogram (HSG) was performed as part of her evaluation. Figure 1 is a PA fluorographic spot film taken after contrast injection into the uterus and five minutes of steady sustained pressure. What is your diagnosis?

- (1) Pelvic inflammatory disease
- (2) Normal hysterosalpingogram
- (3) Incomplete filling of fallopian tubes from poor technique
- (4) Tubal spasm of normal fallopian tubes

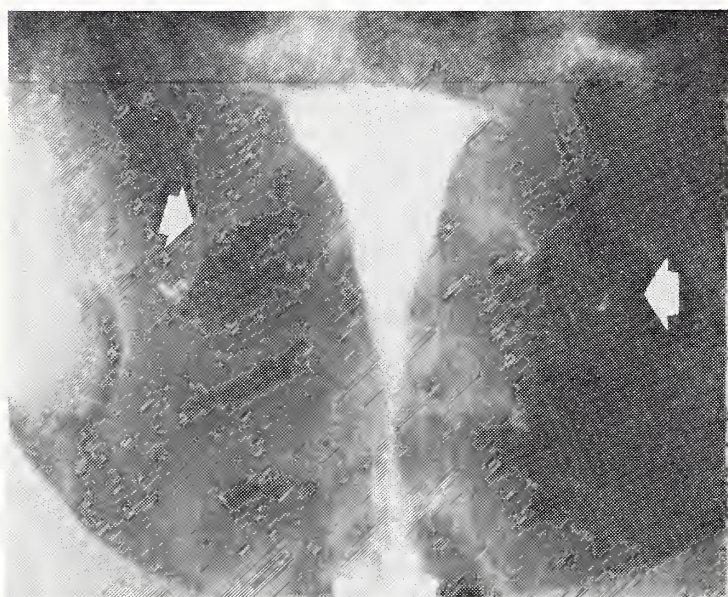


Figure 1. Radiograph obtained after uterine filling and prolonged intrauterine pressure.



Figure 2. Same patient after glucagon administration showing relaxation of tubal spasm and spill of contrast medium into peritoneal cavity (open arrow).

From the Department of Radiology, Vanderbilt University Hospital, Nashville, TN 37232.

Discussion

Figure 1 demonstrates good filling of the uterus and both proximal fallopian tubes (solid arrows) but no free spill of contrast medium or dilation of the fallopian tubes. With the technique described above, there should normally be free spill of contrast medium into the peritoneal cavity, and the absence of spillage suggests an anatomic or functional obstruction. The most common cause of anatomic obstruction is adhesions secondary to previous pelvic inflammatory disease. Unfortunately, obstruction secondary to PID cannot be readily distinguished from functional tubal spasm. Obviously, the distinction is important since adhesions are a cause of permanent infertility.

Several methods have been used to relieve tubal spasm during HSG.¹ These range from gentle reassurance to general anesthesia. Systemic analgesics may also help by relieving the discomfort of the examination. The use of glucagon for the purpose of relaxing tubal spasm has been reported.² If no free spill is observed after five minutes of sustained pressure on the syringe, the patient is given 2 mg of glucagon IV and pressure is again applied for five minutes. When this procedure was tried on the patient described above, the distal fallopian tube was visualized and there was free spill of contrast medium into the peritoneal cavity on the left side (Fig. 2).

In a study performed by Gerlock and Hooser,² nine patients with questionable tubal occlusion on routine hysterosalpingography were given glucagon. Five patients responded with relaxation of the spasm and eventual total spillage of contrast medium. Of the four patients who did not respond to glucagon, three had histories of pelvic inflammatory disease and presumably had adhesions. The authors' impression was that glucagon can significantly reduce the incidence of false-positive hysterosalpingograms.

Answer: Tubal spasm of normal fallopian tubes.

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Ultrasound of Hemangioma of the Neck in a Newborn

ROBERT L. BELL, M.D.

This 22-year-old white lady (gravida II para 0) was postmature by menstrual history, had uterine enlargement that suggested she was full term, but had a cervix that was not effaced. A prior pregnancy resulted in miscarriage during the first trimester. An ultrasound examination of the uterus showed a fetus with a vertex presentation and a biparietal diameter that was 10 cm suggesting postmaturity. The placenta was posterior and fundal, and a rounded mass was noted adjacent to the head. The mass had an echo pattern similar to that of placenta. It was thought that it might interfere with delivery and a repeat ultrasound study was requested. The repeat study (Fig. 1) 19 days later clearly identified the mass as separate from the placenta and attached to the neck or back of the head. It was estimated to be two thirds the size of the head and the echo pattern suggested a vascular lesion. Hemangioma was thought to be the most likely, but myelomeningocele, encephalocele, or even a cystic hygroma could not be ruled out.

Two weeks later the patient suddenly appeared in labor, but she could not be delivered from below and had to have a caesarean section. At delivery a fleshy mass with small areas of purplish discoloration measuring two thirds the size of the head was found attached to the back of the neck, and because of the possibility of myelomeningocele or encephalocele, a CAT scan was performed, which showed changes felt to be compatible with encephalocele. At surgery a very vascular mass was encountered which was not attached to the central nervous system, and the

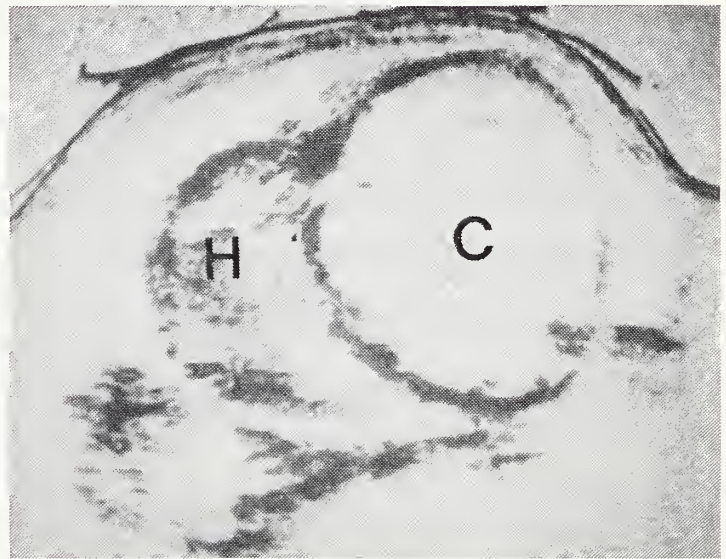



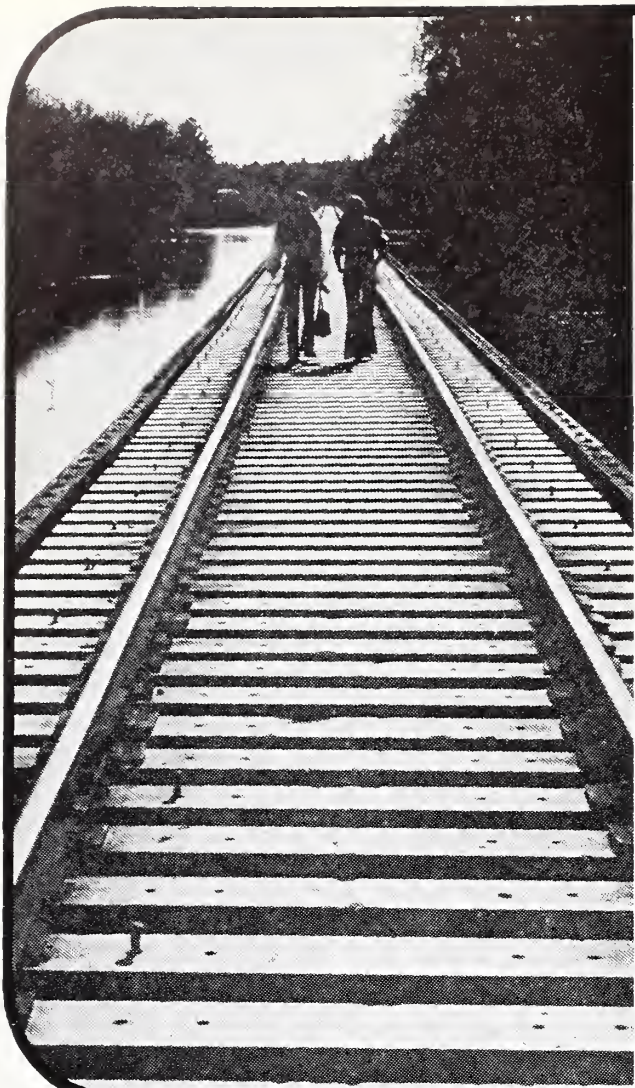
Figure 1. Ultrasound examination of the uterus.
C=Cranium
H=Hemangioma

skull and vertebral column were intact. The mass was identified as hemangioma.

During removal marked bleeding ensued, and cardiac arrest occurred. During the next two days cardiac arrest recurred several times, acidosis and hyperkalemia developed, and the baby expired. At autopsy, the brain was found to be partially liquified. No hemangioma was encountered in the central nervous system and the skull was intact, though small vascular malformations were noted in the lungs and intestines.

Hemangiomas are very common in the newborn, and skin and subcutaneous tissue are the most common site. This ultrasound demonstration of a large hemangioma in utero is particularly valuable because it helps direct the course of therapy during a critical time period. 

From the Department of Nuclear Medicine and Ultrasound, Park View Hospital, Nashville, TN 37203.



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Informed Consent or Contractual Absolution?

The Legitimacy of Contracts Removing Liability for Negligence in the Delivery of Medical Care

C. DAVID MORISON, J.D.

Ms. Y, unmarried, pregnant female, seeks out XYZ abortion clinic for the purpose of obtaining an abortion. Dr. O, clinic physician, goes into some detail of the risks inherent in the procedure and provides pamphlets and brochures explaining the procedure and specifying the steps Ms. Y should take before and after the procedure.

In addition, Dr. O informs Ms. Y that prior to his performance of the abortion she will be required to sign the following document:

lease have upon a subsequent lawsuit by Ms. Y due to a bad result from her abortion, i.e., can she sue after signing the release?

Discussion

The Tennessee Supreme Court in the case of Olson vs. Molzen (____Tenn.____, 558 SW 2d 429, November 21, 1977) held that the exculpatory contract (release) signed by the patient receiving the abortion was invalid as contrary to

DOCTORS MEDICAL-SURGICAL CENTER
OUT-PATIENT ABORTION CLINIC
Common Cause Road
Barefoot, Tennessee

I, Ms. Y, hereby request and authorize Dr. O and whomever he may designate as his assistants, to perform an abortion (interruption of pregnancy) on myself. I authorize Dr. O and his assistants to use whatever anesthetics he may deem necessary.

I am aware of all major and minor risks, hazards, and possible complications associated with this type of surgical operation, including the more common postoperative (after surgery) complications, such as:

(1) Retained products of conception (placenta, or afterbirth), either in part or in whole of an embryo, fetus, or any other tissue debris in the uterus in spite of standard surgical precautions.

(2) Bleeding and/or hemorrhage.

(3) General infection of the vagina, or uterus (womb) that could rarely occur during surgery, but would commonly occur if the patient does not follow postoperative instructions very specifically.

(4) Twin (double), tubal, or ectopic (abnormal) pregnancies, and bicornate uterus (double uterus).

I am aware of the minor risks and hazards, and realize that this type of surgical operation is no different than any other kind of surgical operation and has attending complications that may be beyond the control of the surgeon. I, therefore, release Dr. O and his staff from responsibility associated with any complications that may come up, or be apparent, in the next twelve (12) months.

I also understand that \$200 covers only an ordinary case, with ordinary postoperative progress. If complications should at any time occur that require hospitalization, I agree to go to a hospital of Dr. O's choice and I agree to be responsible for any costs or bills associated with such hospitalization.

I certify that I have carefully read and will strictly follow the list of postoperative instructions titled, "What to Expect in the Next Few Days," realizing any deviation from these could result in complications in my postoperative progress, for which Dr. O would not be responsible.

I also certify that I am under twelve (12) weeks pregnant, that I am age 18, or over, and that no guarantees express or implied, have been given as to performance of surgery, or the ultimate or final results of surgery.

And finally, I completely release Dr. O and his staff from any present or future legal responsibility associated with performing an abortion on myself.

Signed:_____Date:_____

Witness:_____Date:_____

Issue

Assuming all the proper formalities were complied with and Ms. Y understood and voluntarily signed such a release, what effect would the re-

public policy and could not be pleaded as a bar to the patient's negligence suit.

While the court recognized the general rule in Tennessee that such contracts, subject to certain exceptions, have been upheld as valid (Moss vs. Fortune, 207 Tenn. 426, 340 SW 2d 902, 1960,

Mr. Morison is staff attorney, Tennessee Medical Association.

Empress Health and Beauty Spa vs. Turner,——— Tenn.———, 503 SW 2d 188, 1973) this is normally on the theory of assumption of risk as “the public policy of Tennessee favors freedom to contract against liability for negligence.” (503 SW 2d 190) It is interesting to note that Dr. O’s release speaks to the issue of assumption of risk in the references to complications and the increased charges therefore. The argument could also be made that the very reasonable fee charged was the consideration for Ms. Y’s release in that by eliminating liability for malpractice her bill could be substantially reduced, though this concept is somewhat repugnant to modern medical-ethical considerations.

The Tennessee Supreme Court indicated, however, “while these cases are relevant and make it clear that as a general rule a party may contract against his or her own negligence, they do not afford a satisfactory solution in a case involving a professional person operating in an area of public interest or pursuing a profession subject to licensure by the state.

“Some relationships are such that once entered upon they involve a status requiring of one party greater responsibility than that required of the ordinary person, and therefore, a provision avoiding liability is peculiarly obnoxious.”

Adoption of Standards

The key appears to be the holding out of a service to the general public. The Court cited and followed the case of *Tunkl vs. Regents of University of California* (60 Cal. 2d 92, 32 Cal. Rptr. 33, 383 P. 2d 441) where a charity hospital required a release of future liability as a condition of admission. The court there defined the following controlling characteristics for exculpation contracts:

(a) It concerns a business of a type generally thought suitable for public regulation.

(b) The party seeking exculpation is engaged in performing a service of great importance to the public, which is often a matter of practical necessity for some members of the public.

(c) The party holds himself out as willing to perform this service for any member of the public who seeks it, or at least for any member coming within certain established standards.

(d) As a result of the essential nature of the service, in the economic setting of the transaction, the party invoking exculpation possesses a decisive advantage of bargaining strength against any member of the public who seeks his services.

(e) In exercising a superior bargaining power the party confronts the public with a standardized adhesion contract of exculpation, and makes no provision whereby a purchaser may pay additional reasonable fees and obtain protection against negligence.

(f) Finally, as a result of the transaction, the person or property of the purchaser is placed under control of the seller, subject to the risk of carelessness by the seller or his agents. (32 Cal. Rptr. at 37-38, 383 P. 2d at 445-446)

In adopting those standards the Tennessee Court stated:

“We think these criteria are sound and we adopt them. It is not necessary that all be present in any given transaction, but generally a transaction that has some of these characteristics would be offensive. Here, we think all characteristics were present.

“Dr. O held himself out as being willing to perform abortions for the general public. This is obvious from the fact that he operated an abortion clinic. Ms. Y met the statutorily established standards. (See Sec. 39-301, T.C.A.)

“Ms. Y wanted an abortion. Dr. O performed abortions. It begs the question to say she could have gone to another doctor or that she elected to undergo a surgical procedure that was not mandatory. Perhaps so. However, there is no assurance that any other doctor would not have made a similar demand. The record does not show how many other physicians in her area perform abortions, but we have no doubt that the number is limited. Physicians are not required to perform abortions. (See Sec. 39-304 T.C.A.) She had a right to elect to have a legal surgical procedure performed even though there was no compelling medical necessity.

“As a direct consequence of this transaction, Ms. Y placed her person under the control of Dr. O subject to the risk of negligence after he had demanded that she contract away any cause of action that might arise.”

Supreme Court Ruling

A professional person should not be permitted to hide behind the protective shield of an exculpatory contract and insist that he or she is not answerable for his or her own negligence. We do not approve the procurement of a license to commit negligence in professional practice.

Under the guidelines herein adopted, we hold that an exculpatory contract signed by a patient as a condition of receiving medical treatment is invalid as contrary to public policy and may not be pleaded as a bar to the patient’s suit for negligence. (Olson vs. Molzen ——— Tenn. ———, 558 SW 2d 429 Tennessee Supreme Court, decided November 21, 1977)

The Woman Alcoholic — A Hidden Problem

LEE SEITZ

"We Southern gentlemen keep our women at home. They get lonely—start drinking—we lock the doors. And they die of loneliness and alcoholism behind locked doors." This was the response of a noted Tennessee statesman to a question concerning the problems of the woman alcoholic in his state. Is it true that Tennesseans keep their women alcoholics hidden?

Based on national statistics fewer than 1% of alcoholic women are in treatment, which means that there are over 100,000 women in Tennessee who need help—and are unable to get it.

Why does this situation exist and why is it allowed to exist? The problems faced by a woman who becomes an alcoholic are very different from those faced by a man who becomes an alcoholic. The principal detriment to getting a woman alcoholic into treatment is the attitude of the public and of professionals. The age-old "double standard" for men and women still functions and will continue to function for another generation at least. As long as there are people living who were raised under the old moralities, society is going to continue to make distinctions which, in turn, will continue to produce emotional differences. Add to these the physical differences, plus the social and economical differences imposed by society. The single woman alcoholic has additional problems. American society has no clearly defined role for the unattached woman.

The following are some of the more visible problems a woman alcoholic encounters:

1. A woman is affected more quickly by less alcohol because of lower body weight; the onset of alcoholism symptoms usually appears more quickly.

2. She seems to "lose her appearance" more quickly—unkempt hair, no makeup, no interest

in clothes. People expect a woman to "look nice."

3. She becomes physically unable to care for those who depend on her—children, husband, parents, other relatives.

4. She cannot function as a homemaker or housekeeper.

5. She is more susceptible to other physical illnesses, especially those of a gynecologic or urologic nature.

6. She faces pregnancy, with the almost certain possibility of the child's suffering from fetal alcohol syndrome.

7. Her children may be taken from her (her greatest fear).

8. She is labeled sexually promiscuous.

9. The community "looks down on" her.

10. Her children have to care for her, causing a role reversal which shows up as a school problem.

11. Her problem affects the husband causing him to have trouble on the job and in their social life.

12. If she is single, her alcoholism results in job loss and financial difficulties. She cannot turn to lesser manual jobs that men can handle.

13. If she is single, with children, the welfare agencies take the children and leave her with her problem.

14. If she is stopped for drunk driving, the police take her home rather than arrest her and possibly put her in treatment.

15. Physicians seem blind to alcohol symptoms and compound the problem with a diagnosis of "nerves" and prescriptions for Valium, Librium, etc., which produce cross-addiction.

16. The emotional problems are not so visible, but are very real and need specific treatment.

How can we help these women? How can we find them? First of all, communities must be made aware that there is a problem. People have to be educated beyond their social and religious bigotry and prejudices. They must accept the facts as well as face them. Women drink—get drunk—become addicted—are ill—and need

From the Tennessee Department of Mental Health and Mental Retardation, Nashville.

Based on a paper presented at the annual meeting of the Professional Alcohol and Drug Counselors of Tennessee, Montgomery Bell Park, Tenn., Dec. 2, 1977.

help. Communities need to admit this, accept it and learn to live with it.

There are many indicators of the hidden woman alcoholic: children with school problems, welfare cases involving child abuse and neglect, divorce cases giving fathers custody of children, husbands having job difficulties, women with high absenteeism records, homes showing increasing neglect, excess prescriptions for women for tranquilizers, and many others.

The professionals involved with the above indicators are not personally acclimated to being aware of the woman alcoholic. Teachers, school counselors, pediatricians, gynecologists, family physicians, social workers, and personnel counselors are not trained to be aware. If they think of alcohol involvement at all, they connect it with a male member of the family.

What is needed is a tremendous public awareness campaign. Hundreds of books, papers, and articles, are being published. The flood of material is almost overwhelming—but promising. On a national level, committees and offices are being created to deal with this problem. Help is available to individuals and agencies wanting to do something. This year, the woman alcoholic is being made a focal point for the Tennessee Department of Mental Health and Mental Retardation, Alcohol and Drug Abuse Section. Now that the woman alcoholic is becoming less hidden, maybe society and humanity will permit her to emerge and be helped.

If you find a mistake in the JOURNAL, please consider that it was put there for a purpose. We try to publish something for everyone, including those who are always looking for mistakes.

Librax®

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Indications: Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

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Final classification of the less-than-effective indications requires further investigation.

Contraindications: Glaucoma; prostatic hypertrophy, benign bladder neck obstruction; hypersensitivity to chlordiazepoxide HCl and/or clidinium Br.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants, and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Physical and psychological dependence rarely reported on recommended doses, but use caution in administering Librium® (chlordiazepoxide HCl) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions) reported following discontinuation of the drug.

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Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude ataxia, oversedation, confusion (no more than 2 capsules/day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider pharmacology of agents, particularly potentiating drugs such as MAO inhibitors, phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions reported in psychiatric patients. Employ usual precautions in treating anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship not established.

Adverse Reactions: No side effects or manifestations not seen with either compound alone reported with Librax. When chlordiazepoxide HCl is used alone, drowsiness, ataxia, confusion may occur, especially in elderly and debilitated; avoidable in most cases by proper dosage adjustment, but also occasionally observed at lower dosage ranges. Syncope reported in a few instances. Also encountered: isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent, generally controlled with dosage reduction; changes in EEG patterns may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice, hepatic dysfunction reported occasionally with chlordiazepoxide HCl, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax typical of anticholinergic agents, i.e., dryness of mouth, blurring of vision, urinary hesitancy, constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

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Dr., as AMA President

AMA 127th Annual Convention, June 17-22, St. Louis



TOM E. NESBITT, M.D.



Top row, left to right

Speaker of TMA House of Delegates, Dr. Nesbitt (left), presents Outstanding Physician of the Year award for 1967 to Dr. R. H. Hutcheson, Tennessee Commissioner of Public Health.

Dr. Nesbitt, newly elected TMA President in 1970, accepts gavel from retiring President, Dr. Francis H. Cole (right).

Dr. Nesbitt testifies before AMA reference committee.

AMA Board members get heads together. Left to right, Drs. William Rial, Tom Nesbitt (Speaker of AMA House of Delegates), Frank Jirka, and the late Joe Nelson.



Bottom row, left to right

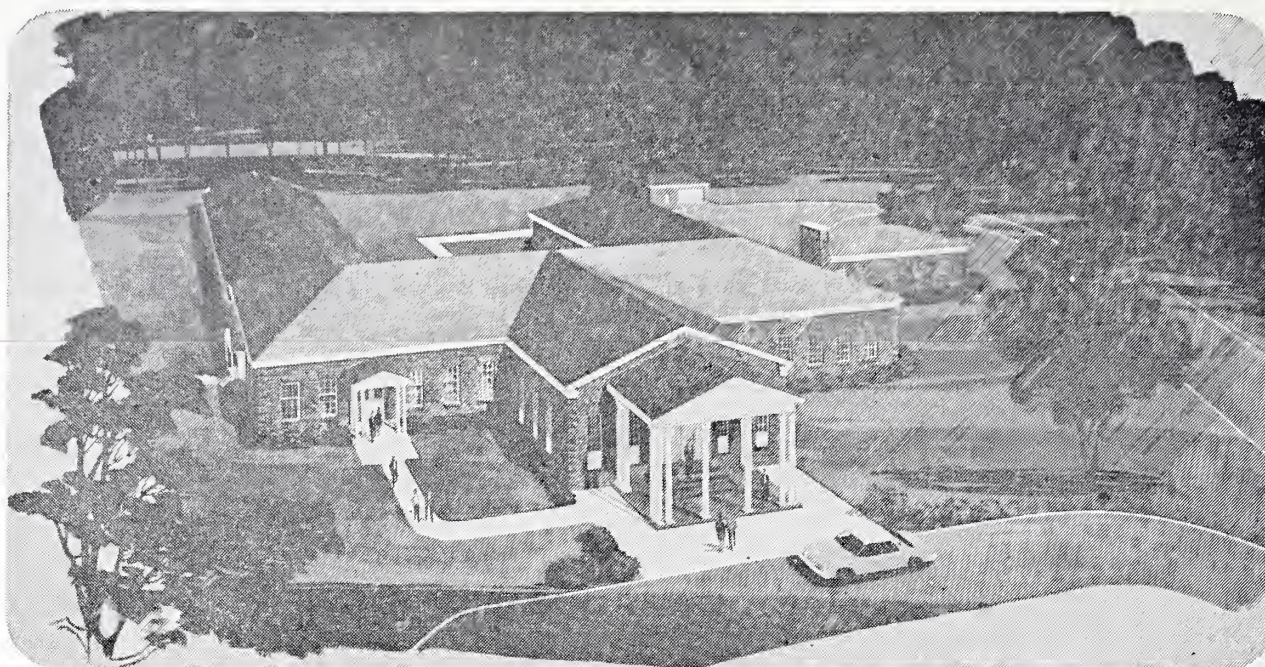
Dr. Nesbitt meets Vice President Gerald Ford in Chicago, 1974.

Mrs. Nesbitt congratulates her husband upon his being named President-Elect of AMA. Dr. William Rial, Vice Speaker of AMA House of Delegates, looks on.

Tennessee's AMA delegates, Dr. A. Roy Tyrer (right) and Dr. John Burkhart (left), presented Dr. Nesbitt with the winner's traditional horseshoe of roses following his no opposition victory in the race for President-Elect of the AMA.



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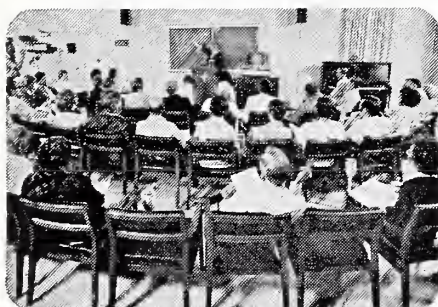
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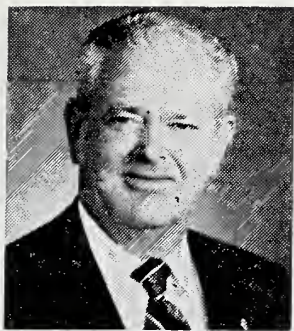
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DAVID H. TURNER

president's page

Twelve Months Later

It has been a privilege and a pleasure for me to have served as President of the Tennessee Medical Association this past year. I am grateful to the members for having given me this honor.

This year has been a busy one for me and I have enjoyed very much the opportunity to meet and become personally acquainted with a large number of involved and concerned physicians across the state.

I believe that this has been a good year for the Tennessee Medical Association. The transition of the staff directorship from the very dedicated Jack Ballentine, to a most capable Hadley Williams, has been smooth. There have been no crises. The medical liability situation has stabilized and the State Volunteer Mutual Insurance Company is operating on a solid base. The Malpractice Review Board is functioning more efficiently to the benefit of all. The Tennessee Foundation for Medical Care is operating the PSRO in a professional manner in spite of criticism, both justified and unjustified, from within and without the profession. A national evaluation has determined that PSROs have been neither quality nor cost beneficial, but an internal study by Tennessee's PSRO would indicate that a savings has been effected for Medicare/Medicaid by its functions. Maybe time will tell.

The Tennessee Physicians Protective Association has been organized, and it is our hope that this organization, with its support to physician members who countersue when they have been improperly sued for medical actions, will have a deterring effect on medical liability suits.

Apparently, National Health Insurance has been moved to the "back burner" by Congress, at least temporarily. The administration has stated its plans to introduce new NHI legislation soon but knowledgeable people recognize this as a political consideration and believe the chances of the bill's passage are slight. We must continue to work diligently for the best interests of the public, our patients and the profession of medicine as we best see it.

We are fortunate to have as our new President, John B. Dorian, M.D., of Memphis. Dr. Dorian is a highly respected family practitioner who has served in many civic, political and medical capacities. His introduction is included elsewhere in the JOURNAL. I have known him for many years and know him to be a dedicated, conscientious, hard worker, who will be a good leader for our Tennessee Medical Association. Let us all work together with him for the betterment of our Association, our profession and the people of the great state of Tennessee.

Sincerely,

David H. Turner, M.D.

PRESIDENT

THE NEW PRESIDENT



JOHN B. DORIAN, M.D.
MEMPHIS

JOHN B. DORIAN, M.D.

90th President—Tennessee Medical Association

THE Tennessee Medical Association is known nationwide for its outstanding leadership in medical organization affairs. That tradition of leadership will continue in the year 1978-79 with our new President, John B. Dorian, M.D. The House of Delegates has chosen a man with vast experience in all levels of the medical organization to guide the Association in the upcoming year. His greatest asset may possibly be his willingness to listen while being able to speak frankly on the issues which affect the state's physicians. All members of the Association should be proud and consider themselves fortunate to have such an individual who will work hard to keep TMA one of the most respected associations in the state of Tennessee.

Born in 1926, Dr. Dorian began his medical career by receiving his M.D. degree from the University of Tennessee College of Medicine in 1952. He then took a one-year rotating internship at John Gaston City of Memphis Hospital and has been in the full-time general practice of medicine in Memphis since that time.

He has served both the Memphis-Shelby County Medical Society and the Tennessee Medical Association in many leadership roles throughout the past 25 years. He has been a member of many committees in the Memphis-Shelby County Medical Society and has been a member of its House of Delegates since 1965. He was president of the society in 1973 and chairman of the Censor Committee in 1976. In addition, he has served his society as a delegate to the TMA House of Delegates since 1966.

In the most recent years Dr. Dorian has been one of the most active and forceful leaders in the Tennessee Medical Association. From 1971-75 he served as a TMA Judicial Councilor for the Tenth District and from 1974-76 was a member and chairman of the Committee on Communications and Public Service. He has served IMPACT (Independent Medicine's Political Action Committee-Tennessee) as chairman for the Ninth District from 1970-72 and secretary-treasurer from 1971-72. He was elected to the TMA Board of Trustees in 1976.

Dr. Dorian is a Fellow in the American Academy of Family Physicians and a past president of the Memphis Academy of Family Physicians. He was speaker of the Congress of Delegates of the Tennessee Academy of Family Physicians in 1967 and in 1972 was named by the Academy as the "Family Practitioner of the Year."

While maintaining an extremely busy private practice of medicine and serving his local, state and medical specialty societies, Dr. Dorian has been very instrumental in the formation of the State Volunteer Mutual Insurance Company. He has been a member of the Board of Directors of SVMIC since 1976 and has served as its treasurer and chairman of its Investment Committee. His advice in the operation of SVMIC is valued by all of the Board members who have made State Volunteer Mutual one of the most solvent and efficient physician-owned insurance companies in the nation.

Dr. Dorian is a member of the active staff of St. Joseph's Hospital in Memphis, where he was president of the medical staff in 1968 and currently is a member of the Medical Records and Medical Audit Committee. He is on the consulting staff of both Baptist Memorial and Methodist hospitals, and since 1975 he has been an assistant clinical professor for the University of Tennessee's Department of Family Practice.

While being an invaluable resource to many medical organizations, Dr. Dorian has found time to serve in many leadership roles in his community including a former member of the Board of Directors of the Memphis Blue Cross-Blue Shield and the Board of Directors of the Mid-South Medical Center Council, the HSA serving the Memphis area. He has also been a state advisor to the American Association of Medical Assistants and has served the Frazier Lion's Club as past president.

Dr. Dorian's dedication to his profession and patients is surpassed only by his dedication to his family. He and his lovely wife, Susan, have six children: Chris, Steve, Teresa, Jeannine, Pat and Jennie.

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APRIL, 1978

editorials

Meet Me In St. Louis, Louie, et al

Because attendance at AMA Conventions has been declining in recent years, a couple of years ago the Board of Trustees recommended that the Annual Convention be discontinued after June, 1978. The recommendation was approved by the House of Delegates, and so the 127th Annual Convention of the AMA in St. Louis, June 17-22 will also be the last. It will be replaced by semi-

annual meetings of the House, and the several large educational meetings—perhaps three—in addition to the many smaller regional meetings.

Tom Nesbitt, who has been President of TMA and Speaker of the House of both TMA and AMA, will have the distinction of winding it all up with his inauguration on June 21 as the 133rd President of the American Medical Association. It will be a shame if a lot of you aren't there to see it.

J.B.T.

Eulogy for a Sunset

There is an old song which says, "The best things in life are free." Collectors have a hard time believing that, because even if you collect sea-shells, for example—free, if you really get into it you can be freed of quite a bit of money hunting and buying them. Few things really are both "best" and "free." Among them are sunsets. I am a collector of sunsets (sunrises too), particularly those over water. To the extent they cost time they aren't altogether free, but they cost as little as almost anything. When places I have been come to mind, I can often close my eyes and conjure up a sunset there. Some of them are memorable. Some are immortalized on film—after a fashion, though a lot is lost in the process. But in my memory they are bright as ever.

I have just added a sunset—over water—to my collection. It was not a memorable sunset, but it was part of a memorable experience. Sunsets over water are harder to come by than sunrises in this part of the country, but one of the places you can find them is on the east coast of Mobile Bay. From my hotel room there I watched the sunset begin to take shape, and I finished it out on the sea wall, sitting on a cold stone bench of art nouveau inlay, listening to the waves go she-e-e-o-oo-oo-oom-sh-e-ee-o-oo-oom . . . against the jettys and rocks below, watching the afterglow turn from gold to red and finally fade into the reflection on the clouds of the lights of Mobile across the bay.

A cruiser came by flashing her lights, looking for the channel markers, blinding me. As I turned to go, the eastern sky began to light up through one of the huge live oaks behind me. The swirling clouds became pale silver and then slipped away to unveil a full moon, but almost as soon as the clouds parted they smudged the moon with gray, then quenched it. This sequence was repeated several times before the heavier clouds

finally claimed all rights to the moonlight, leaving me to walk in darkness back to the hotel.

Back in my room, from the window I could see the water and clouds and the live oaks and pines fade in and out of view, as first the pale light of the moon and then the black of night prevailed. The clouds were continuing their battle for supremacy.

Soon the early rays of the morning sun will catch the clouds across the bay and turn them red and gold again. But that's another story.

J.B.T.

Hail to the Czar

It is sort of an old saw to say you sometimes have to laugh to keep from crying, and so I have had to laugh at an oft repeated statement in the current dispute between the coal miners and the government over the Taft-Hartley injunction to the effect that the government is singling out and moving against the coal miners in a discriminatory fashion.

As there is not enough money in the world to pay me to be a coal miner, I'll not dwell on the merits of their case. But the facts indicate they have no right to feel exclusive. I can only say, "Boys, welcome to the club!"

So as not to reinvent the wheel, so to speak, I'll simply refer you to a couple of cases in point, which appear in our National News section under headings entitled "Health Planning Act Changes Studied" and "Medicare: HEW Blows it Again."

Read them and weep, or laugh, whichever you feel impelled to do. Then face the east and do obeisance to Czar Joe.

J.B.T.



Wilfred C. Carreras, age 73. Died February 6, 1978. Graduate of the Medical College of Tulane University. Member of Sullivan-Johnson County Medical Society.

L. C. Cox, age 83. Died February 15, 1978. Graduate of Western Reserve Medical School. Member of Sullivan-Johnson County Medical Society.

John R. Smoot, age 84. Died February 8, 1978. Graduate of University of Tennessee School of Medicine. Member of Knoxville Academy of Medicine.

new members

The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

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Robert J. Dixon, M.D., Oneida

TIPTON COUNTY MEDICAL SOCIETY

Jiunn H. Ho, M.D., Covington

WILLIAMSON COUNTY MEDICAL SOCIETY

Richard G. Lane, M.D., Franklin

Thomas H. Patterson, M.D., Franklin

Douglas C. York, M.D., Franklin

personal news

The following TMA member physicians have recently been certified as Diplomates of the American Board of Family Practice: *Jerry F. Atkins, M.D.*, Huntingdon; *Gay K. Battle, M.D.*, Johnson City; *Lana S. Beavers, M.D.*, Shelbyville; *Alton R. Boyd, M.D.*, Clarksville; *Ralph L. Brickell, Jr., M.D.*, Tulsa; *Wilbert E. Brooks, M.D.*, Nashville; *Mike J. Brown, Jr., M.D.*, Memphis; *Duane C. Budd, M.D.*, Johnson City; *John T. Bushore, M.D.*, Knoxville; *Warner L. Clark, M.D.*, Church Hill; *James F. Cleveland, M.D.*, Englewood; *Elijah G. Cline, Jr., M.D.*, LaFollette; *William W. Cloud, M.D.*, Knoxville; *Hugh Don Cripps, M.D.*, Smithville; *Daniel L. Dickerson, M.D.*, Kingsport; *Kenneth C. Dozier, M.D.*, Lebanon; *Nicholas H. Edwards, M.D.*, Grand Junction; *Roy C. Ellis, Jr., M.D.*, Harrogate;

Augustus C. Ford, M.D., Chattanooga; Rupert A. Francis, M.D., Nashville; Angelo J. Garbarino, Jr., M.D., Newport; William R. Gaw, M.D., Nashville; Ronald D. Hall, III, M.D., Lake City; James B. Havron, M.D., South Pittsburg; David G. Heald, M.D., Oak Ridge; James W. Hedden, M.D., Chattanooga; Richard Bruce Heintz, M.D., Johnson City; George L. Holmes, III, M.D., Lafayette; Royce L. Holsey, Jr., M.D., Elizabethton; James B. Kelley, M.D., Columbia; James E. McAfee, M.D., Memphis; Frank S. McKnight, M.D., Somerville; John P. McNulty, M.D., Portland; Jimmy A. Meeks, M.D., Parsons; John W. Minchey, M.D., Knoxville; Robert W. Montague, M.D., Chattanooga; Tony J. Montgomery, M.D., Clarksville; Robert P. Oliver, Jr., M.D., Memphis; Robert D. Pilkinton, M.D., Madison; Bill S. Portis, M.D., Huntingdon; Billy G. Robbins, M.D., Ripley; Jones F. Rutledge, Jr., M.D., Lewisburg; George W. Shannon, M.D., Jackson; William P. Titus, III, M.D., Clarksville; Charles M. Von Henner, M.D., Collegedale; Rodger T. Wallace, M.D., Nashville; Clinton S. Webb, M.D., Johnson City; Thomas W. Williams, M.D., Etowah; Joseph L. Willoughby, M.D., Franklin; James W. Wilson, M.D., Memphis.

The following physician members were named Fellows of the American Academy of Family Physicians: *Marvin R. Batchelor, M.D., Cleveland; James R. Boyce, M.D., Athens; Edwin E. Gray, Jr., M.D., Tullahoma; R. Winn Henderson, M.D., Knoxville; T. L. Pedigo, M.D., McMinnville; Ralph W. Simon-ton, M.D., Portland.*

H. A. Morgan, Jr., M.D., Lewisburg, who retired Jan. 10 after 39 years of dedicated service in the Tennessee Department of Public Health, was honored with a reception by the Dyer County Board of Health and the medical and administrative staff of Parkview Hospital. The staff of the Dyer County Health Department and the supervisory staff of the Northwest Tennessee Regional Office also honored Dr. Morgan with a luncheon and a handsome retirement gift.

W. K. Owen, M.D., Pulaski, will serve as chief of the medical staff of Giles County Hospital during 1978. *Buford Davis, M.D., Pulaski*, was reelected secretary of the medical staff.

Joseph F. Smiddy, M.D., Kingsport, has been elected president of the medical staff of Holston Valley Community Hospital for 1978.

programs and news of medical societies

Maury County Medical Society

The Maury County Medical Society met March 6, 1978 at the Chalet Restaurant, with 34 members and two guests in attendance. The speaker, Dr.

James Phillip Wilson, lectured on "Newer Agents in Treatment of Hypertension" and "Algorithmic Approach to Renovascular Hypertension." Dr. Thomas Dake presided over the business meeting and announced new members to the society. Dr. Tom Young announced that the annual black-tie installation banquet will be held Saturday evening, May 6, at the Memorial Building.

Nashville Academy of Medicine

The Nashville Academy of Medicine held its general membership meeting on Tuesday, March 14, 1978 at Memorial Hospital. The program, presented by the local unit of the American Cancer Society, provided the membership with valuable information on the cancer rehabilitation and counseling services available in the community: Reach to Recovery, the Lost Chord Club, ALIVE, and the Ostomy Association.

national news

From the AMA's Office in Washington, D.C.

Hospital Cost Cap Vote Nears

The fate of the plan for federal controls on hospital revenues may be decided shortly in a crucial congressional arena—the House Ways and Means Subcommittee on Health.

The subcommittee has before it the administration's plan for a flat 9% ceiling on hospital revenue increases and the proposal by Subcommittee Chairman Dan Rostenkowski (D-Ill.) for a standby federal control plan if the voluntary effort fails. Many members of the subcommittee are opposed to both approaches and the final vote may be close.

(The voluntary effort—VE—is a broad national program led by the American Hospital Association, the American Medical Association, and the Federation of American Hospitals that seeks to achieve significant reductions in the rate of increase in hospital costs over the next several years. It has a national steering committee and state-level committees in all but one or two states.)

Rostenkowski, in a speech before the AHA's annual meeting, had set forth his plan as a possible compromise that might secure the backing of health providers. He said the controls would take effect only if the voluntary effort to curb costs failed to reach its goal of a 2% drop in the annual rate of hospital revenue increases.

However, the AHA said the Rostenkowski plan "would have an adverse impact on the efforts already underway in the voluntary effort for hospital cost containment." "Furthermore," the association said, "arbitrary caps on hospital revenues are tantamount to wage-price controls on one segment of an industry and, as such, are inequitable and administratively unworkable."

Rostenkowski had told the AHA that his subcommittee was evenly divided on the administration's proposal for a flat 9% cap on all hospital revenue boosts and a limitation on capital expenditures. He said he would seek to push his standby plan as a possible way out of the impasse.

The AHA, however, sent a Washington alert to all members strongly opposing the Rostenkowski standby control plan.

The AHA contended in its alert that Rostenkowski's triggering mechanism for the revenue cap "could place the legislative controls in effect despite a successful voluntary effort. For example, the voluntary effort will be deemed to have failed even if the rate of increase in costs is reduced by 4% or more in the next two years, but the decrease is the sum of a greater than 2% reduction the first year and a less than 2% reduction the second."

In later years "if the rate ever increases beyond the prior year level, no matter how small or how justified the increase might be (i.e., as a result of uncontrollable factors in the economy), the legislative revenue cap would go into effect."

The triggering mechanism, according to the AHA, "would destroy the incentive to reduce costs voluntarily. If hospitals in the aggregate reduced their costs as much as possible in one year, they could find it more difficult to cut as much the next. On the other hand, if hospitals limit their efforts in the first year, they probably would be in a better position to sustain their level of effort the following year. In other words, the provisions of the triggering mechanism would hamper efforts to reduce costs as rapidly as possible."

In addition, the triggering mechanism does not take into account changes in inflation or gross national product increases from year to year, according to the AHA. "The voluntary effort provides that its goal be adjusted in accordance with the changes in the rate of increase (inflation plus real growth) in the GNP," said AHA.

The Ways and Means Subcommittee is acting under time pressure caused by the new budget procedures in Congress. The full committee must have ready by March 1 a statement on the budget impact of the legislation it is expected to approve this year.

At a subcommittee meeting on the issue, Rep. Willis Gradison (R-Ohio) said he was disturbed that under the standby plan it would be Aug. 15 of this year before hospitals knew exactly what the federal government had determined to be the "target" percentage on which to measure rate reduction goals under the voluntary effort. He challenged the staff assertion that the data could be gathered in a relatively simple manner and said that variations in such items as depreciation and treatment of accrued costs could measurably affect a hospital's financial statement.

Gradison also complained that the Rostenkowski substitute no longer provided an exclusion for the 4,000 small hospitals which an earlier substitute contained.

The Ohio lawmaker questioned why the "trigger" for federal controls was mandatory and not discre-

tionary. Rep. Omar Burleson (D-Tex.) suggested the subcommittee exercise oversight authority to review voluntary effort progress and legislate later if needed.

Health Planning Act Changes Studied

Congress is moving early on the controversial Health Planning Law which comes up for renewal this year. Sen. Edward Kennedy (D-Mass.) and Rep. Paul Rogers (D-Fla.) have introduced legislation to amend the law, and the administration has set forth its ideas on changes.

The three approaches are similar, generally strengthening the present law rather than diluting it. The three proposed bills all would subject expensive new equipment in physicians' offices to planning approval, the most significant change from the standpoint of physicians.

Appearing before the House Commerce Subcommittee on Health, officials of the AMA urged a flat repeal of the planning law. If this can't be accomplished, AMA amendments shifting authority and responsibility for planning to the local level should be adopted, the witnesses said.

Testifying for the AMA were Frank Jirka, Jr., M.D., of Berwyn, Ill., vice chairman of the AMA Board of Trustees; and Archie Johnson, M.D., of Raleigh, N.C.

Dr. Jirka told the subcommittee that "health planning must be flexible enough to accommodate the different medical needs of various communities and of individual patients and thus to insure the availability of high quality medical care for all persons."

"This is best achieved by placing the planning authority and power at the local level and by insuring that those most directly involved have the basic responsibility for making decisions regarding the quality, distribution, and availability of services."

Rather than improve the planning program, most of the amendments submitted so far would "impose additional limitations and ration health resources," Dr. Jirka said.

Three major proposals in the planning amendment legislation introduced by Subcommittee Chairman Rogers "cause us deep concern" Dr. Jirka said. These would extend the certificate-of-need to physicians' offices, require states to develop a program to discontinue health services deemed to be inappropriate, and give the Health, Education and Welfare Department much tighter control over Title 16 (Health Resources Development) funds.

Broadening certificate-of-need to cover purchase of major medical equipment in physicians' offices would be a "dramatic extension" of the planning law that "could have long-range unintended effects," the AMA official said.

Dr. Jirka noted that the National Commission on the Cost of Medical Care, an independent committee sponsored by the AMA, recommended that certificate-of-need extend to physicians' office equipment only if the program proves effective as a cost containment measure for hospitals and even then

only to cover facilities or services duplicating those within institutions. Replacement equipment would be exempt.

Dr. Jirka continued: "There is as yet little evidence to support the notion that certificate-of-need results in significant cost-savings, even for those services presently covered. Until such evidence is compiled the extension of certificate-of-need as proposed would be inappropriate. Moreover, we all must recognize that cost considerations cannot be isolated from the necessity of maintaining quality."

The Rogers provision for discontinuance of health services deemed inappropriate under national criteria developed by the HEW secretary poses the question of whether "HEW can better make decisions as to what services are needed in a community than the community itself," said Dr. Jirka. "Is Congress willing to gamble with the future health care in this country in the absence of any experience that may be gained through presently unproven guidelines?" he asked.

Dr. Johnson urged Congress to require that specific percentages of practicing physicians be members of Health Systems Agency (HSA) governing bodies, state health coordinating councils and the National Health Planning Council.

The physician expressed strong opposition to amendments that empower the HEW secretary to set maximum and minimum standards for local institutional health services, saying this "undermines any notion of community-based health planning."

"It would insure that HSAs would merely be the enforcement mechanism for planning decisions made by HEW," said Dr. Johnson.

The AMA is "extremely disappointed that none of the proposals being considered would reverse the aggrandizement of federal control," he declared. "In fact, certain recommendations would insure the secretary's status of health care czar. This ever increasing federal regulation of medical care is inimical to the best interests of patients."

Dr. Johnson insisted that health planning decisions be made locally. "Our proposals are aimed at restoring to local communities the decision-making power in health planning, and, more importantly, are specifically aimed at curbing excessive powers of the secretary. We cannot emphasize enough the need at this time to realign the planning program by circumscribing excessive federal authority as a fundamental step in insuring a rational determination of need for health resources based on community and patient needs."

Medicare: HEW Blows It Again

At the direction of the government, health insurance carriers are mailing letters to the nation's physicians listing their total dollar Medicare business last year. Physicians have 30 days in which to review the figures and return them to the carrier with comments or changes.

The totals for all physicians will be available to the public at the offices of the carriers, the

regional offices of HEW, and at Medicare's main office in Baltimore, Md.

The compilation is a follow-up of the decision by HEW last year to publish the names of physicians who did more than \$100,000 a year in Medicare business. HEW Secretary Joseph Califano said the "sunshine" laws regarding public scrutiny of federal operations required public disclosure.

Under the new approach now being carried out, there is no \$100,000 cut-off. All Medicare total payments to physicians for the previous calendar year will be open to those seeking the specific information.

The physicians will receive the total payments to them under Medicare assignment as well as total Medicare payments to their patients not on assignment.

The cost of gathering such figures for the carriers is expected to run well over \$1 million, which the government will subsidize.

Physicians Visit Congressional Delegations

Representatives from 17 state medical societies recently visited their congressmen in Washington to give their views on important pending health bills in a one-day legislative blitz.

Fifty-five physicians, medical society executives and other officials took part in the visitation sponsored by the AMA.

The state delegations focused their talks on the hospital cost containment and health planning measures now heading for crucial votes. The state officials reported congressmen were eager to hear their views and welcomed the interchange.

States represented included California, Colorado, Connecticut, Florida, Illinois, Indiana, Louisiana, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Texas, Virginia and West Virginia.

Feds Issue New HMO Regulations

The government has issued new rules requiring health maintenance organizations (HMOs) to make their services available and accessible around the clock, to operate on a fiscally sound basis, and to create governing bodies with more consumer representation.

In addition, the regulations cut the paperwork for Medicare and Medicaid patients who enroll in HMOs.

Joseph Califano, HEW secretary, said the rules "constitute an important step in our drive to expand" HMOs.

"The new rules are designed to ease the administrative burden which HMOs have faced in the past in attempting to serve both Medicare and Medicaid patients," he said.

One change would reimburse HMOs that serve Medicare patients for the cost of insurance the

HMOs buy against catastrophic illness among their members.

NCI Investigates Laetrile

To see if laetrile has any documentable antitumor effects, the National Cancer Institute will collect medical records from cancer patients who have used the controversial drug.

Laetrile is now available in 14 states, and NCI officials hope data from the large number of patients thought to be using the drug will be decisive in deciding whether or not to proceed to clinical trials. Laetrile has failed to show a reproducible antitumor effect in at least a dozen animal trials.

According to NCI's Neil Ellison, M.D., the same criteria used in judging case reports of other cancer therapies will be used to judge laetrile. Cancer diagnosis in patients submitting records will have to be proven by biopsy, and objective evidence of antitumor effects will have to be shown by x-ray, scanning, physical examination, or other means.

NCI is interested in patients who used laetrile with or without the metabolic therapy and chelating agents now being advocated by laetrile proponents.

announcements

CALENDAR OF MEETINGS

NATIONAL

1978

- April 23-27 American Association of Neurological Surgeons, Fairmont Hotel, New Orleans
- April 24-25 American Broncho-Esophagological Association, Breakers Hotel, Palm Beach, Florida
- April 24-29 American Academy of Neurology, Bonaventure Hotel, Los Angeles
- April 28-29 American College of Clinical Pharmacology, Sheraton-Palace, San Francisco
- April 30-May 3 American Association of Plastic Surgeons, St. Francis Hotel, San Francisco
- May 3-6 American Pediatric Surgical Association, The Homestead, Hot Springs, Virginia
- May 3-6 American College of Legal Medicine, Stanford Court, San Francisco
- May 4-6 American Association for the History of Medicine, Kansas City, Kansas
- May 4-6 Christian Medical Society, Navigators HQ, Glen Eyrie, Colorado

- May 4-7 Association of Clinical Scientists, Drake Hotel, Chicago
- May 4-7 American Society of Internal Medicine, San Francisco
- May 5-7 American Academy of Psychoanalysis, Atlanta
- May 8-10 American Association for Thoracic Surgery, Hyatt Regency, New Orleans
- May 8-12 American Psychiatric Association, Georgia World Congress Center, Atlanta
- May 14-17 American Lung Association, Sheraton-Boston, Boston
- May 14-17 American Thoracic Society, Sheraton Hotel, Boston
- May 14-19 American Society for Microbiology, Hilton Hotel, Las Vegas
- May 19-20 American Association of Clinical Urologists, Washington Hilton, Washington, D.C.
- May 21-25 American Urological Association, Hilton Hotel, Washington, D.C.
- May 24-27 American College of Sports Medicine, Capital Hilton, Washington, D.C.
- May 1978 American Academy of Facial Plastic and Reconstructive Surgery, The Breakers, Palm Beach, Florida
- June 1-3 American Rhinologic Society, Mayo Clinic, Rochester, Minnesota
- June 4-8 American Association of Immunologists, Hyatt House, Atlanta
- June 11-13 American Diabetes Association, Sheraton Boston, Boston
- June 11-15 American Society of Colon and Rectal Surgeons, Town & Country Hotel, San Diego
- June 14-18 American Medical Women's Association, Cheshire Inn and Lodge, St. Louis
- June 17-22 American Medical Association, 127th Annual Convention, St. Louis
- June 27-30 Society of Nuclear Medicine, Disneyland Hotel, Anaheim, California
- June 29-July 1 National Conference on Nutrition in Cancer, Washington Plaza Hotel, Seattle

STATE

- May 25 Middle Tennessee Medical Association, Murfreesboro Country Club, Murfreesboro, Tennessee

The continuing medical education accreditation program of the TMA has full approval by the Liaison Committee on Continuing Medical Education. An accredited institution or organization may designate for Category 1 credit toward the AMA Physician's Recognition Award those CME activities that meet appropriate guidelines. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Ave., Nashville, TN 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

IN TENNESSEE

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman, can plan an individualized program of one to four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, ward rounds, learning individual procedures, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

Participating Departments and Divisions

Allergy & Immunology	Samuel Marney, M.D.
Anesthesiology	Bradley E. Smith, M.D.
Cardiology	Gottlieb C. Friesinger, III, M.D.
Chest Diseases	James D. Snell, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Dermatology	Lloyd King, M.D.
Diabetes	Oscar B. Crofford, M.D.
Endocrinology	David Rabin, M.D. David N. Orth, M.D.
Gastroenterology	Steven Schenker, M.D.
General Internal Medicine	W. Anderson Spickard, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.
Medicine	Grant W. Liddle, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Oncology	Robert Oldham, M.D.
Orthopedics	Paul W. Griffin, M.D.
Pathology	William H. Hartmann, M.D.
Pediatrics	David T. Karzon, M.D.

Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Everette James, Jr., Sc.M., J.D., M.D.
Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sergent, M.D.
Surgery	
Cancer Chemotherapy	Vernon H. Reynolds, M.D.
General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neill, M.D.
Plastic	John B. Lynch, M.D.
Renal Transplantation	Robert E. Richie, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.

Eligibility: All licensed physicians are eligible.

Administrative Fee: \$200.00 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1) and American Academy of Family Physician's Continuing Education accreditation.

Application: For further information and application, contact: Paul E. Slaton, M.D., Director, Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

Continuing Education Schedule 1978

April 27	Annual Frank H. Luton Lecture in Psychiatry (1 hour)
April 27	Current Concepts in Medical Oncology
April 28-29	2nd Annual Gynecological Oncology Course (11 hours) and 9th Annual Frank A. Whitacre Memorial Lecture—J. Donald Woodruff, M.D., Johns Hopkins University, will speak on "An Evening with Ogden Nash"
May 1-2	Family Therapy Seminar
May 4-6	American Association of Medical Dosimetrists
May 18-19	17th Annual Seminar in Psychiatry (for nonpsychiatrists) (11 hours)
May 18-21	Scientific Sessions of the Vanderbilt Medical Alumni Reunion (11 hours)
May 29- June 3	Annual Family Practice Intensive Review (40 hours)
June 25-30	Pharmacokinetics
July 6-9	Contemporary Clinical Neurology—Hilton Head, S.C. (16 hours)
Sept. 21-22	Postgraduate Course in Allergy
Fall, 1978	Parenteral Alimentation
Fall, 1978	Update in Management of Urologic Tumors

For information contact: Vanderbilt Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

MEHARRY MEDICAL COLLEGE SCHOOL OF MEDICINE

Extended Continuing Education Program

Arrangements have been made with the following services and departments in the medical school to allow practicing physicians to participate in that service's activities for a period of one to four weeks. This program provides an opportunity for physicians to study in depth for a specified period. The schedule of activities is individualized in response to the physician's request by the participating department. The experience includes conferences, ward rounds, audiovisual materials and contact with patients, residents and faculty.

Participating Departments

Anesthesiology	Ramon S. Harris, M.D.
Family Practice	John Arradondo, M.D.
Internal Medicine	
Cardiology	John Thomas, M.D. Kermit R. Brown, M.D. Qamar A. Kahn, M.D.
Chest Disease	Joseph M. Stinson, M.D. Paul A. Talley, M.D. Edward A. Mays, M.D.
Dermatology	Thomas W. Johnson, M.D. David Horowitz, M.D.
Gastroenterology	Ludwald O. P. Perry, M.D. Buntwal M. Somayaji, M.D.
General Medicine	Edward A. Mays, M.D.
Hematology/Oncology	Robert S. Rhodes, M.D. Robert S. Hardy, M.D.
Neurology	Calvin L. Calhoun, Sr., M.D. Gregory Samaras, M.D.
Obstetrics & Gynecology	Henry W. Foster, M.D.
Gynecological Endocrinology	Elwyn M. Grimes, M.D.
Ophthalmology	Axel C. Hansen, M.D.
Orthopedics	Wallace T. Dooley, M.D.
Pathology	Louis D. Green, M.D. John C. Ashhurst, M.D.
Pediatrics	E. Perry Crump, M.D.
Surgery	
General	Louis J. Bernard, M.D.
Neurological	Charles E. Brown, M.D.
Thoracic and Cardiovascular	David B. Todd, M.D. Ira D. Thompson, M.D.
Urology	Marcelle R. Hamberg, M.D.

Fee: \$100 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1), American Academy of Family Physicians Continuing Education Accreditation and Continuing Education Units by Meharry Medical College.

Application: For further information contact Frank A. Perry, M.D., Director, Continuing Education, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

Continuing Education Schedule

May 24-26	Internal Medicine—1978 (24 hours)
October	Cleve Ewell Hematology Seminar (6 hours)

For information contact Frank A. Perry, M.D., Director of CME, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

UNIVERSITY OF TENNESSEE CLINICAL EDUCATION CENTER

Chattanooga

Continuing Education Schedule 1978

April 25	Gynecologic Cancer—McMinn-Monroe County Medical Society
April 25	Workshop on Basic Fetal Monitoring, Chattanooga
April 26	Current Concepts & Indications for Pacing for the Primary Care Physician—Chattanooga
April 29	Antibiotic Seminar—Chattanooga
May 4-5	Pediatric Update '78—Chattanooga
May 9	Helminthic & Parasitic Infections Requiring Intermediate Hosts—McMinn-Monroe County Medical Society
June 1-3	Basic Cardiology, EKGs & Therapy for the Primary Care Physician—Chattanooga
June 14-19	OB/GYN Emergencies — Humacao, Puerto Rico

For information contact: LeRoy J. Pickles, Director, Continuing Medical Education, Suite 400, 921 E. 3rd St., Chattanooga, TN 37403, Tel. (615) 756-3370.

UNIVERSITY OF TENNESSEE CENTER FOR THE HEALTH SCIENCES

Knoxville Unit

Feb.-June	Update in Obstetrics for Physicians—
1st Friday	University of Tennessee Memorial Research Center and Hospital, Knoxville.
each month	<i>Credit:</i> 8½ hours AMA Category 1 and AAFP elective. <i>Fee:</i> None (limited registration).

For information contact I. Ray King, M.D., or Mrs. Molly Meighan, Regional Perinatal Office, Drawer 26, 1924 Alcoa Hwy., Knoxville, TN 37920, Tel. (615) 971-3100.

EAST TENNESSEE CHILDREN'S HOSPITAL

May 2-3	Pediatric Infectious Diseases
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For information contact: Karen Lee Shields, Committee on Continuing Medical Education, East Tennessee Children's Hospital, 2018 Clinch Ave., Knoxville, TN 37916.

PRACTICE PRODUCTIVITY INC.

May 12-13	How to Establish a Successful Practice: Two-day workshop for residents in training programs—Holiday Inn-Medical Center, Memphis. <i>Fee:</i> \$95.
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For information contact Duane M. Johnson, Ph.D., Executive Vice President, Practice Productivity Inc., 2000 Clearview Ave., Atlanta, GA 30340, Tel. (404) 455-7344.

IN SURROUNDING STATES

UNIVERSITY OF KENTUCKY

Mini-Residencies for Medical and Surgical Practitioners in Office Management Of Emotional Problems

The objective of this course is to give physicians an ideal emotional counseling technique that fits busy office practices. The technique uses a concept of emotions that is consistent with human anatomy and psycho-physiology. Yet, the technique requires no more physician time or patient cost than routine evaluations of new patients. Finally, the technique is readily understandable and easy for practitioners to apply.

One, two and three week courses. Minimum of 40 hours per week. *Tuition Fee:* \$350 per week for the 1st & 2nd week of training; \$500 for 3rd week of supervised practice with patients in the Intensive RBT Treatment Program.

For further information contact: Maxie C. Maultsby, Jr., M.D., Office of Continuing Medical Education, Dept. of RBT, University of Kentucky, Lexington, KY 40506.

Continuing Education Schedule 1978

- May 4-5 Medical and Behavioral Problems in Older Persons—Hyatt Regency Lexington, Lexington, Ky. *Credit:* 12 hours AMA Category 1. *Fee:* \$80.
- May 17-19 Surgical Diseases in Children: Radiologic Evaluation and Operative Correlation—Hyatt Regency Lexington, Lexington, Ky. *Credit:* 15 hours AMA Category 1. *Fee:* physicians, \$180; residents, \$90.
- May 25-26 Cardiology for the Practicing Pediatrician—Hyatt Regency Lexington, Lexington, Ky. *Credit:* 12 hours AMA Category 1. *Fee:* \$85.
- June 2-3 Fiberoptic Bronchoscopy: A Workshop—Hyatt Regency Lexington, Lexington, Ky. *Credit:* 13 hours AMA Category 1. *Fee:* \$250.
- June 8-10 Wagensteen Symposium on Surgical Management of Visceral and Breast Cancer—Hyatt Regency Lexington, Lexington, Ky. *Credit:* 15 hours AMA Category 1. *Fee:* \$150.
- Oct. 27-28 Fluid and Electrolyte Balance Made Simple—Hyatt Regency Lexington, Lexington, Ky. *Credit:* 10 hours AMA Category 1. *Fee:* \$75.
- June 25-30 Ninth Family Medicine Review (Sessions I, II, and III)—Hyatt Regency Lexington, Lexington, KY. *Credit:* 50 hours AMA Category 1 and AAFP. *Fee:* \$295.

For information contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, KY 40506.

MEDICAL COLLEGE OF GEORGIA

May 2 Orthopedics and Pathology

For information contact: Division of Continuing Education, Medical College of Georgia, Augusta, GA 30901.

GEORGIA LUNG ASSOCIATION

June 14-18 Third Annual Symposium on Lung Disease—The Cloister, Sea Island, Ga.

For information contact Betty Rafshoon, Georgia Lung Association, 1383 Spring St., N.W., Atlanta, GA 30309, Tel. (404) 876-3601.

BOWMAN GRAY SCHOOL OF MEDICINE

Course in Ultrasound

An eight-week postgraduate course in sonic medicine at Bowman Gray School of Medicine will be offered on April 3-May 26, 1978. *Credit:* 30 hours per week in AMA Category 1. An additional two-day real time course is offered for obstetricians on June 1-2, 1978. *Credit:* 10 hours per day in AMA Category 1.

For information contact: James F. Martin, M.D., Director, Center for Ultrasound, Bowman Gray School of Medicine, Winston-Salem, NC 27103.

OF SPECIAL INTEREST

AMERICAN COLLEGE OF PHYSICIANS

A comprehensive schedule of continuing medical education activities for a 12-month period beginning in August, 1977, includes regional meetings and postgraduate courses to be held at various locations throughout the United States and Canada.

The ACP Regional Meetings, lasting one to four days, are designed for practicing internists and physicians in related fields. They bring new developments in the basic sciences and clinical medicine from major research centers to internists who are unable to travel to medical meetings outside of their state, and also provide a vehicle for local physicians to report to their colleagues on investigative work and clinical experiences in the wide scope of subject areas included in the practice of internal medicine.

The ACP Postgraduate Courses provide the opportunity for in-depth study in fields covered by internal medicine and its subspecialties. Averaging three to five days, they are directed toward practicing physicians and are presented in association with medical schools and other teaching institutions.

For information and registration contact: Registrar, Postgraduate Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

Regional Meetings

*See September 1977 issue for complete
1977-1978 listing*

Postgraduate Courses

*See September 1977 issue for complete
1977-1978 listing*

- Apr. 26-28 Applied Immunology: The Rheumatic Diseases, Birmingham, Ala.
- Apr. 27-29 Three Days of Hepatobiliary Diseases—Atlanta
- May 8-12 Advances in Clinical Medicine—New Haven, Conn.
- May 8-12 Recent Progress in Clinical Endocrinology: Physiological Approach to Diagnosis and Treatment—Ann Arbor, Mich.
- May 10-12 Clinical Auscultation of the Heart—Washington, D.C.
- May 10-12 Nuclear Medicine for the Internist—Rochester, Minn.
- May 15-19 Rheumatic Diseases: Clinical Aspects and Basic Mechanisms—Boston
- May 22-24 Multidisciplinary Management of Solid Tumors—Rochester, Minn.
- May 22-24 Hematology Update 1978—Rochester, Minn.
- May 22-26 Review of the Old and New in the Diagnosis and Therapy of Infectious Diseases, New Orleans
- May 31-
June 3 Clinical Cardiology—Update 1978—Vancouver, B.C.
- May 31-
June 3 Neurology for Internists and Family Physicians—Winston-Salem, N.C.
- June 5-9 Internal Medicine: Recent Advances in Diagnosis and Treatment—Cincinnati
- June 14-17 Critical Care Medicine 1978—Banff, Alberta
- June 23-26 Infectious Diseases—Winnipeg, Manitoba
- July 10-12 Topics in Clinical Hematology V: Disorders of Proliferation and Maturation—Waterville, Me.
- July 13-15 Topics in Clinical Oncology V: Multidisciplinary Approaches to Difficult Cancer Problems—Waterville, Me.

AMERICAN CANCER SOCIETY— NATIONAL CANCER INSTITUTE

- June 29-
July 1 National Conference on Nutrition in Cancer—Washington Plaza Hotel, Seattle. *Credit:* AMA and AAFP. *Fee:* None.

For information contact Sidney L. Arje, M.D., ACS-NCI, National Conference on Nutrition in Cancer, 777 Third Ave., New York, NY 10017, Tel. (212) 371-2900.

AMERICAN MEDICAL ASSOCIATION

Medical Staff Leadership Seminars—1978

- March 31- Little American Westgate Hotel, San
April 1 Diego
- May 26-27 Plaza Hotel, New York
- Sept. 29-30 Fairmont Hotel, New Orleans
- Nov. 3-4 Eden Roc Hotel, Miami Beach

Credit: 14 hours AMA Category 1.

Fee: AMA member of medical society staff, \$150; nonmember, \$200.

For information contact AMA Department of Hospitals and Health Facilities, 535 N. Dearborn St., Chicago, IL 60610, Tel. (312) 751-6653.

AMERICAN MEDICAL GOLF ASSOCIATION and AMERICAN MEDICAL TENNIS ASSOCIATION

11th Annual Desert Medical Classic Physicians Scientific/Golf/Tennis Event

- April 30- Symposium on Sexual Dysfunction,
May 5 Drug Addiction, Alcoholism, Senescence, and Litigation; the Challenging Personal Problems Affecting 20th Century Physicians—Canyon Hotel and Country Club, Palm Springs, Cal.
- Credit:* 8 hours AMA Category 1.

For information contact Desert Medical Classic, P.O. Box 183, Alton, IL 62002, Tel. (618) 462-6841.

INTERNATIONAL ACADEMY OF CHEST PHYSICIANS AND SURGEONS (Affiliated with the ACCP)

- July 2-7 XIII World Congress on Diseases of the Chest—Kyoto International Conference Hall, Kyoto, Japan. *Fee:* ACCP members, \$120; nonmember physicians, \$140.

For information contact Alfred Soffer, M.D., Executive Director, American College of Chest Physicians, 911 Busse Hwy., Park Ridge, IL 60068, Tel. (312) 698-2200.

THE MENNINGER FOUNDATION

Workshops for Physicians and their Families

- June 18-23 Physicians and their Families: An
and Experience in Communication—YMCA
Aug. 13-18 of the Rockies, Estes Park, Colo.
- Credit:* 25 hours AMA Category 1 and AAFP Prescribed. *Fee:* \$325 per family (parents and unmarried children under 21 years of age).

For information contact Erwin T. Janssen, M.D., Director of Division of Continuing Education, The Menninger Foundation, Box 829, Topeka, KS 66601, Tel. (913) 234-9566.

ASSOCIATION FOR HEALTH RECORDS

9th Annual Conference on Health Records

May 22-24 Measuring the Quality of Patient Care—Is it Worth the Cost? (cosponsored by American Association of Health Data Systems)—Detroit Plaza Hotel in the Detroit Renaissance Center.

For information contact W. H. Kincaid, Case Western Reserve University, School of Medicine, Cleveland, OH 44106, Tel. (216) 368-3737.

INDIANA UNIVERSITY INSTITUTE FOR SEX RESEARCH

June 21-28 9th Annual Summer Program in Human Sexuality—Indiana University, Bloomington, Ind. *Fee:* \$325.

For information contact Institute for Sex Research—Summer Program, 416 Morrison Hall, Indiana University, Bloomington, IN 47401.

ESTES PARK INSTITUTE

The Estes Park Institute, a non-profit educational organization, will sponsor Hospital Medical Staff Conferences and Hospital Trustee Forums at the dates and locations below. *Credit:* 30 hours AMA Category 1 (each location). *Fee:* \$190.

May 21-25 Sun Valley, Idaho

June 25-29 Oconomowoc, Wisconsin

Oct. 1-5 Pocono Manor, Pennsylvania

Nov. 12-16 Pacific Grove, California

Dec. 3-7 Clearwater Beach, Florida

For information contact Estes Park Institute, P.O. Box 400, Englewood, CO 80151, Tel. (303) 761-7709.

NETWORK FOR CONTINUING MEDICAL EDUCATION

Schedule for Upcoming Programs

April 17-30 Intestinal Parasites: A Cosmopolitan Disease—with Harry Most, M.D., New York University School of Medicine, N.Y.C.

Noninvasive Cardiac Diagnosis: Applications in Perspective—with Alfred F. Parisi, M.D., Veterans Administration Hospital, West Roxbury, Mass., and Harvard Medical School, Boston.

The Prevention of Bilirubin-Related Toxicity in Newborns—with Lawrence M. Gartner, M.D., Albert Einstein College of Medicine, Bronx, N.Y.

May 1-14 Diagnostic Imaging—with Byron G. Brogdon, M.D.; Robert H. Mosely, Jr., M.D.; and Fred A. Mettler, Jr., M.D., University of New Mexico School of Medicine, Health Sciences Center, Albuquerque, N.M. (1 hour AMA Category 1; AAFP Prescribed credit)

May 15-28 Hypercalcemia: A Guide to Decision-Making—with Lawrence G. Raisz, M.D., University of Connecticut Health Center, Farmington, Conn.

May 29-June 11 The New Vegetarians: A Health Food Hype?—with Johanna Dwyer, D.Sc., director, Frances Stern Nutrition Center, New England Medical Center Hospital, Boston.

Giant Cell Arteritis: Diagnosis and Treatment—with Robert C. Griggs, M.D., Strong Memorial Hospital, Rochester, N.Y.

Management of Patients on Respirators—with Leonard D. Hudson, M.D., Harborview Medical Center and University of Washington School of Medicine, Seattle.

THE TENNESSEE HOSPITAL ASSOCIATION & THE TENNESSEE SOCIETY OF HOSPITAL ATTORNEYS

announce the

FOURTH ANNUAL T-E-A-M CONFERENCE

*A conference designed especially for
TRUSTEES, EXECUTIVES, ATTORNEYS and MEDICAL STAFFS*

July 21-22, 1978

Hilton Airport Inn, Nashville

Medical Staff Bylaws and Staff Privileges • Risk Management • The Use of Attorney by the Hospital • Trustee Legal Obligations • Immunity of Medical Staff/Administrators/Trustees in Refusing or Granting Privileges • Changing Aspects of Board, Management & Medical Staff Relationships

For further information contact: Paul Taylor, Ph.D., Tennessee Hospital Association, 500 Interstate Blvd. South, Nashville, TN 37211, Tel. (615) 256-8240

NCI Evaluation of Cancer Patients Who Have Benefited from Laetrile Therapy

The cooperation of physicians is requested in the referral of cancer patients who appear to have benefited from the use of laetrile therapy. Records of these patients will be analyzed in an attempt to document anticancer responses to laetrile with or without "metabolic therapy" (the use of special diet, vitamins, enzymes and chelating agents). The National Cancer Institute will use the data to decide whether controlled studies of laetrile therapy should be undertaken.

Cancer patients are eligible for evaluation if they have biopsy-proven cancer with objective evidence of anticancer response as documented by scans, x-rays, physical exams, or other means, during a period when the patient was treated only with laetrile therapy. Conventional therapy at some time during the patient's treatment is acceptable, as long as there was at least a one-month period when laetrile therapy alone was used.

Physicians interested in further details and in having patients considered for the evaluation may write or telephone: Neil Ellison, M.D., Laetrile Review Office, Landow Bldg., Room C808, 7910 Woodmont Ave., Bethesda, MD 20014; Tel. (301) 496-9326.

Clinical Center Study of Twins With Parkinson's Disease

The cooperation of physicians is requested in the referral of twins with Parkinson's disease for studies being conducted by the National Institute of Neurological and Communicative Disorders and Stroke, Infectious Diseases Branch at the Clinical Center, National Institutes of Health, Bethesda, Md., in collaboration with Dr. Roger Duvoisin, Department of Neurology, Mt. Sinai School of Medicine, New York. Only one twin of a pair need be affected, and the study will focus on the genetic contribution to this disease.

Physicians interested in further details or in having their patients considered for admission may write or telephone: Dr. Donal B. Calne, Clinical Director, NINCDS-NIH, Bldg. 10, Room 6D20, Bethesda, MD 20014, Tel. (301) 496-1561; or Dr. Roswell Eldridge, Infectious Diseases Branch, NINCDS-NIH, Federal Bldg., 7550 Wisconsin Ave., Bethesda, MD 20014, Tel. (301) 496-1187.

Clinical Center Study of Patients With Sickle Cell Anemia

The cooperation of physicians is requested in the referral of patients with sickle cell anemia for studies being conducted by the National Heart, Lung, and Blood Institute, Clinical Hematology Branch at the Clinical Center, National Institutes of Health, Bethesda, Md.

Patients of all ages are needed who are either on chronic transfusion regimens or who are candidates for such therapy. After an initial evaluation of each patient in the untransfused state for extent of organ damage, exercise tolerance, and iron balance, partial exchange transfusion will be carried out. In cooperation with the referring physicians less than 50% Hb S will be maintained for a period of one year when the evaluation will be repeated.

Physicians interested in further details or in having their patients considered for admission may write or telephone: Robert M. Winslow, M.D., or Arthur W. Nienhuis, M.D., Clinical Hematology Branch, NHLBI-NIH, Bldg. 10, Room 7B15, Bethesda, MD 20014; Tel. (301) 496-3676.

NCI-VA Study of Patients with Small Cell (Oat Cell) Carcinoma Of the Lung

The National Cancer Institute-VA Medical Oncology Branch, located at the Veterans Administration Hospital, Washington, D.C., requests the cooperation of physicians in the referral of veteran or nonveteran patients with small cell (oat cell) carcinoma of the lung for participation in an intensive treatment program of chemotherapy and radiotherapy. Patients of either sex are eligible and may not have received previous chemotherapy or radiation therapy and must be at least partially ambulatory and willing to return to Washington, D.C., for periodic follow-up care.

The referring physician will be kept informed of the results of staging and treatment and will be encouraged to participate in the follow-up care of the patient. Since patients with small cell carcinoma often require prompt treatment, physicians interested in a possible referral may call: Attending Physician, NCI-VA Medical Oncology Branch, VA Hospital, 50 Irving St., N.W., Washington, DC 20422; Tel. (202) 389-7275.

Clinical Center Study of Patients With Noninfectious Granulomatous Lung Diseases

The cooperation of physicians is requested in the referral of patients with noninfectious granuloma-

tous lung diseases (sarcoidosis, hypersensitivity lung disease, eosinophilic granuloma) for a study of the treatment of this condition being conducted by the National Heart, Lung, and Blood Institute, Pulmonary Branch at the Clinical Center, National Institutes of Health, Bethesda, Md. This study is part of a multidisciplinary investigation of the pathogenesis and chemotherapy of the fibrotic lung disorders.

Physicians interested in further details or in having their patients considered for admission may write or telephone: Attending Physician, Pulmonary Branch, NHLBI-NIH, Bldg. 10, Room 6N260, Bethesda, MD 20014; Tel. (301) 496-1597.

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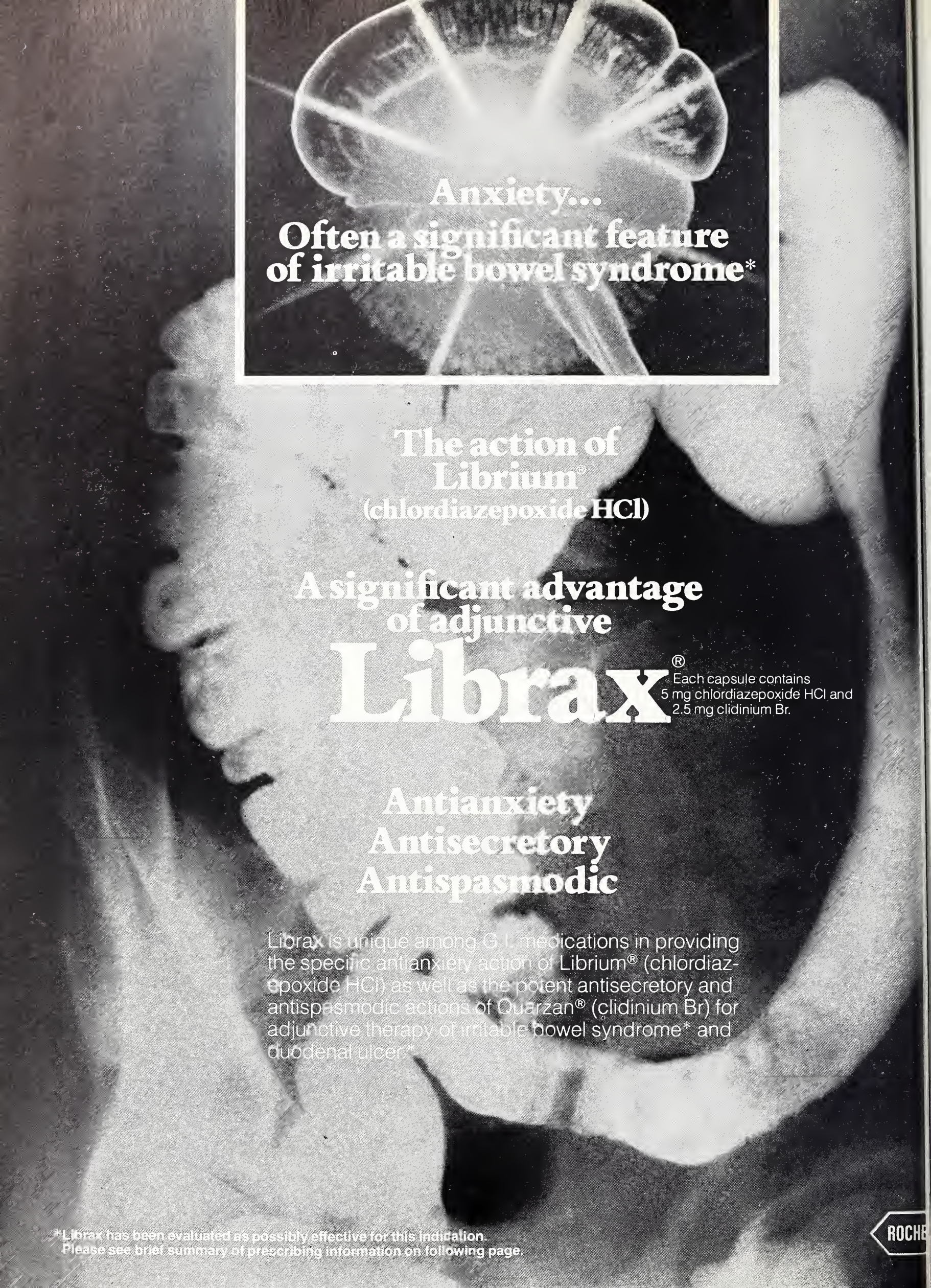
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ROCHE

Effectiveness of Twice-Daily Dosage of Methyldopa in Essential Hypertension

JOHN W. HOLLIFIELD, M.D., and PAUL E. SLATON, JR., M.D.

Introduction

The Joint National Committee on Detection, Evaluation, and Treatment of Hypertension has recommended adding to diuretic treatment an adrenergic blocking agent as the second step in treating hypertensive patients who do not experience a sufficient fall in blood pressure after a suitable trial with a diuretic alone.¹

We have reported previously² and it has been confirmed by others³ that the addition of an adrenergic blocking agent such as methyldopa significantly enhances blood pressure reduction brought about by thiazide diuretics.

This combination therapy, while achieving significant improvement in blood pressure control, has the disadvantage of requiring frequent dosing intervals and additional medication. Sackett⁴ and Eshelman⁵ have reported, for hypertensive patients specifically, that the simpler the therapeutic regimen the greater the compliance with the medication schedule. Because considerable information in the literature suggests that methyldopa has more prolonged biological activity than its plasma half-life might indicate^{6,7} and as there is a compelling need to reduce frequency of dosing, we elected to evaluate concomitant methyldopa and hydrochlorothiazide (HCTZ) therapy—comparing twice-daily and four-times-daily schedules.

One of the chronic effects of diuretic therapy is to raise plasma renin activity (PRA).² It has been suggested that methyldopa effectively lowers

PRA in normal or high-renin hypertensives, yet little data in the literature document this phenomenon. Since elevated renins may be a significant cardiovascular risk factor in hypertensive disease, it seemed important to also compare the effect of the two dosing regimens for their relative renin lowering activity.

The recent availability of a 500-mg methyldopa tablet permitted us to combine these interests into a single study comparing the effects of methyldopa bid vs. qid on blood pressure and PRA in patients who were not adequately responsive to diuretic therapy. Because of these patients' relative resistance to antihypertensive therapy, we decided to initiate methyldopa dosage at 1 gm daily rather than 750 mg/day, the more customary starting dose.

Methods and Materials

Twelve ambulatory patients with essential hypertension who had previously demonstrated inadequate blood pressure control (greater than 140/90 mm Hg after six weeks' therapy) on diuretics alone were selected for this open-labeled crossover study.

Patients were excluded if they had coronary artery or cerebrovascular disease, insulin-dependent diabetes, active liver disease, or renal impairment (the latter established by creatinine >1.5 mg% untreated or >2.4 mg% during diuretic screening period). Also excluded were lactating and pregnant women (established when necessary by menstrual history and appropriate pregnancy test). Informed written consent was obtained from each patient who met the eligibility criteria, and the protocol was approved by the local review committee. All potentially conflicting

From the Hypertension Center, Vanderbilt University Hospital, Nashville.

Reprint requests to Hypertension Center AA4206, Vanderbilt Hospital, Vanderbilt University School of Medicine, Nashville, TN 37232 (Dr. Hollifield).

medication was disallowed throughout the trial. A specified nonaspirin analgesic and a sodium-free antacid were the only drugs permitted for coadministration.

In order to establish a stabilized baseline blood pressure all patients were placed on a regimen of HCTZ 50 mg twice a day, which remained constant throughout the study. After an initial four-week period, patients were randomly assigned by lot to either one of two groups of equal number, group A to receive methyldopa 250-mg tablets four times a day, group B to receive methyldopa 500-mg tablets twice a day. Thus in both groups the total daily dosage of methyldopa was 1 gm. Six weeks later, methyldopa was discontinued for four weeks while HCTZ 50 mg twice daily was maintained without interruption. Then the groups were switched to the alternate methyldopa regimen for a final six weeks. Total duration of study was 20 weeks. This procedural scheme is summarized in Table 1.

Patients were seen weekly in the Ambulatory Hypertension Clinic of the Clinical Research Center at Vanderbilt University Hospital. An effort was made to schedule appointments on the same day of the week at the same approximate time. Blood pressure was measured initially and at each visit thereafter in the same manner by a trained nurse using a mercury manometer. The sequence of blood pressure measurement for all patients was as follows: rest supine for ten minutes, then three supine measurements, and after two minutes, three readings in erect position. The means of the supine and erect readings were used for analysis of comparative dosage effects.

In addition, blood pressure during routine daily activity was self-monitored by each patient, once

at the end of each of the two diuretic-only periods and twice at the end of each of the two methyldopa periods. An automated, noninvasive, ambulatory blood pressure recording system (Remler^(R))⁸ was used for this purpose. This method incorporates an electrode, cuff, and pump taped to the patient's arm, a recording box strapped at the belt level, and a small laboratory-type timer attached to the shirt facing. At a signal from the timer (at approximately 15 to 30 minute intervals), the patient activates the device and inflates the cuff. In this way blood pressure is automatically recorded 30 to 70 times during the course of a 24-hour period.

In addition to the blood pressure determinations, at each clinic visit patients were asked to complete a questionnaire which included a side effects list. Medication intake and compliance were regularly monitored.

Blood specimens were taken 20 times, i.e., at each visit, and analyzed for hematology, electrolytes, Coombs' test, liver and kidney functions, protein fractions, calcium, phosphorus, cholesterol, and triglycerides (SMAC-24). In all 12 patients peripheral PRA was measured on the last week of each treatment period. PRA during HCTZ-alone therapy was contrasted with PRA during treatment with HCTZ and methyldopa.

Paired-t analysis was performed to assess the significance of the blood pressure differences between bid and qid methyldopa regimens and between HCTZ and methyldopa. The two-tailed test for paired data was also used for analysis of renin and other laboratory data.

Results

Twelve patients, nine black and three Caucasian, completed the trial as scheduled. Mean age of the seven men and five women was 51.3

TABLE 1
STUDY PLAN

	Thiazide Screening Period	Methyldopa Treatment	Thiazide Washout Period	Methyldopa Treatment
	Four weeks	Six weeks	Four weeks	Six weeks
Group A	HCTZ 50 mg bid	Methyldopa 250 mg qid plus HCTZ 50 mg bid	HCTZ 50 mg bid	Methyldopa 500 mg bid plus HCTZ 50 mg bid
Group B		Methyldopa 500 mg bid plus HCTZ 50 mg bid		Methyldopa 250 mg bid plus HCTZ 50 mg bid

years, mean weight was 82.2 kg. The alternate dosing groups were comparable in these demographic characteristics.

Weekly blood pressure determinations recorded at the clinic showed that HCTZ plus either of the methyldopa regimens provided significantly ($p < 0.001$) greater blood pressure reduction than HCTZ alone (Table 2). There was no significant difference ($p > 0.05$) between the two methyldopa regimens.

As such values reflect blood pressure at only one point during the day, we recorded blood pressure on multiple occasions during the day by means of the ambulatory semiautomated technique described.

A summary of these changes, broken down into four-hour intervals, is shown for the combined sequences in Table 3. The mean ambulatory blood pressure for all intervals at the end of each treatment period was $162 \pm 1.4/105 \pm 1.1$ mm Hg for HCTZ alone (first administration), $133 \pm 1.9/89 \pm 1.1$ mm Hg for HCTZ plus methyldopa bid, $161 \pm 1.3/105 \pm 1.4$ mm Hg for HCTZ alone (second administration), and $132 \pm 1.6/89 \pm 0.9$ mm Hg for HCTZ plus methyldopa qid.

Again, the blood pressure during both methyldopa regimens was significantly ($p < 0.001$) lower than during the respective preceding HCTZ dose period, while there was no significant

($p > 0.05$) difference between the two methyldopa dosing schedules.

Both methyldopa regimens significantly ($p < 0.01$) reduced renin values measured during the respective preceding HCTZ-alone period, while comparison between the two methyldopa periods, i.e., bid or qid, showed no difference in renin reducing effect (Table 4).

Seven of the 12 patients complained of some side effects during the study, but none was disabling nor of sufficient degree to require dosage reduction, and each was of the type customarily seen with either of the two active agents.

One man reported impotence throughout the trial, but this condition had preexisted the study for years. Another complained of reduced libido during the methyldopa qid, but not the bid, regimen. Otherwise side effects were limited to occasional reports of drowsiness, fatigue, dizziness, dry mouth, and headache. One patient claimed to have had bad dreams during qid dosing.

Statistical analysis of means was carried out for the entire battery of laboratory tests performed. There were no significant differences ($p > 0.05$) between the two regimens nor between either of the HCTZ-alone segments and the respective succeeding methyldopa period.

Finally, the number of unused tablets was

TABLE 2
SUMMARY OF AMBULATORY (REMLER RECORDING) BLOOD PRESSURE (mm Hg)
CHANGES BY DRUG REGIMEN

		HCTZ Alone				HCTZ + Methyldopa bid				HCTZ Alone				HCTZ + Methyldopa qid			
		Hr. 08-12	12-16	16-20	20-24	08-12	12-16	16-20	20-24	08-12	12-16	16-20	20-24	08-12	12-16	16-20	20-24
		No. 12	12	12	12	12	12	12	12	12	12	11	11	12	12	12	12
Systolic	Mean	162	162	162	162	136	132	133	132	160	160	162	163	131	132	131	130
	Std. Error \pm	4.3	4.8	4.0	3.9	3.2	2.5	2.2	2.5	3.4	3.7	3.5	3.7	2.8	2.3	2.7	2.6
Diastolic	Mean	106	105	105	105	99	89	89	89	105	105	106	104	89	89	90	88
	Std. Error \pm	1.7	1.3	1.7	1.6	1.0	1.3	0.8	1.1	1.2	1.3	1.5	1.5	1.0	1.2	1.1	0.9

TABLE 3
SUMMARY OF OUTPATIENT (CLINIC) BLOOD PRESSURE
CHANGES BY DRUG REGIMEN

	HCTZ Alone	HCTZ + Methyldopa bid	HCTZ Alone	HCTZ + Methyldopa qid
Mean (mm Hg)	164/107	132/90	159/107	131/90
Std. Error (\pm)	4.1/2.9*	3.6/2.0*†	3.1/1.9*	2.9/1.7*†

* $p < 0.001$

†=Not Significant

TABLE 4
SUMMARY OF RENIN/SODIUM RATIO CHANGES BY
DRUG REGIMEN

	HCTZ Alone	HCTZ + Methyldopa bid	HCTZ Alone	HCTZ + Methyldopa qid
Mean (ng/ml/hr)	1.96	0.99	2.10	0.80
Std. Error (\pm)	0.28*	0.15*†	0.46*	0.10*†

* $p < 0.01$

†=Not Significant

compared for the two 6-week methyldopa regimens. An average of 10.3 tablets was missed during the bid regimen compared to 14.0 tablets during the qid regimen. While the difference was of only borderline significance ($0.1 > p > 0.05$) in this small group of patients, it clearly pointed to the importance of dosage frequency.

Discussion

This study was in substantial agreement with the published literature that shows methyldopa to be an effective antihypertensive agent. Blood pressure levels achieved during HCTZ administration were significantly reduced when either methyldopa bid or qid was added. The data thus also support the Joint National Committee's¹ recommendations that an adrenergic blocking agent such as methyldopa should be administered to patients whose blood pressure fails to respond to a thiazide alone.

The study also showed that methyldopa is well tolerated, on the basis of reports of side effects as well as laboratory determinations, and its effectiveness and safety are manifest whether the drug is given twice or four times a day. Though not statistically significant there was better adherence to the medication schedule during bid administration than during qid administration. This difference was somewhat unexpected in this study, because most of these patients had participated several times previously in studies of other antihypertensive agents and thus were well aware of the importance of compliance with medication routines.

Kaplan³ has discussed the fact that the rise in PRA associated with thiazide therapy may interfere with blood pressure reduction and contribute to hypokalemia. He has also shown that addition of methyldopa inhibits the tendency toward thiazide-induced rise in PRA while blood pressure continues to decrease and good renal function is maintained.

This study supports those findings. PRA elevated during thiazide administration was significantly lowered when methyldopa was added; simultaneously, blood pressure reduction was significantly enhanced and laboratory values remained within normal limits. Both methyldopa regimens had an essentially equivalent effect on renin suppression.

Summary

A 20-week study was conducted to determine whether blood pressure reduction, safety, and renin suppressant activity were essentially equivalent when methyldopa was administered either twice or four times a day to 12 patients with essential hypertension which was not responsive to customary thiazide doses. Weekly clinic determinations and daily ambulatory measurements showed that significant blood pressure reductions were obtained when methyldopa was added after an HCTZ-alone period and that there was essentially no difference between bid and qid regimens with regard to effectiveness, safety, or renin suppression. Methyldopa bid therapy as a second step following inadequate response to thiazides is effective and well tolerated and can be recommended.

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Microvascular Surgery: New Horizons in Reconstructive Surgery

JOHN D. FRANKLIN, M.D., JAMES J. MADDEN, JR., M.D. and J. B. LYNCH, M.D.

The compound microscope, which was invented by Zacharia Janssen in 1592, has been used in medicine for many years, especially in microbiology and pathology. The clinical use of the microscope as an aid to surgery received its greatest impetus in the 1920s with ear surgery. Fifty years passed before much interest or potential for using the microscope in vascular surgery was realized.¹ In 1960, Jacobson and Suarez² did much to stimulate microvascular surgery. They reported a 100% patency rate in 26 arteries which varied in size from 1.6 to 3.2 mm using 25X magnification. This report opened the avenues for study and research in microvascular surgery, and the potential for one-stage reconstruction of various defects was realized.

Many investigators have been interested in microvascular surgery. One of the leaders in the field has been Bernard O'Brien, in Melbourne, Australia. In 1975, Hayhurst and O'Brien³ reported a 98% patency in 0.9 mm arteries, and 92% patency in 1.1 mm veins. No anticoagulant was used. The study showed that the true patency rate of a microvascular anastomosis was best de-

termined two weeks postoperatively. This type of success was made possible by intense practical research, as well as development of better microscopes and finer sutures and needles.

Surgeons realized that, with the success in maintaining patency in small vessels, large composite free flaps could be moved from one portion of the body to the other and could maintain viability with microvascular anastomoses. This type of reconstruction would have the tremendous advantage of being a one-stage procedure which would result in minimal deformity at the donor site and help minimize the length of hospitalization with many complex reconstructive procedures. A moderate amount of research in this area was

TABLE 1
PENIS AMPUTATION

Replantation	No.	Urination	Erection	Sensation	Skin Complications	Urethra Complications
Microvascular ^{5,6}						
Shaft	2	2	1	2	0	0
Nonmicrovascular ⁷						
Shaft						
complete	6	5	3;2*	4*;1†	5	4
incomplete	4	4	3;1*	4*	2	1
Shaft						
complete	3	3	2	1;1*	3	1
incomplete	1				0	0
TOTAL	16					

* present but diminished
† absent

From the Department of Plastic Surgery, Vanderbilt University Medical Center, Nashville, TN 37232.



Figure 1. Partial amputation of penis (case 1).



Figure 2. Replanted penis three weeks postinjury (case 1).

forthcoming in the late 1960s and early 1970s. By 1972, surgeons in Japan and Australia performed the first successful free flap transfers. The first free flap in the United States was performed in 1973.⁴

Case Presentations

The Department of Plastic Surgery at Vanderbilt University Medical Center and its affiliated hospitals have been interested in microvascular surgery for several years. Microvascular techniques have been applied to a number of clinical situations of which the following are a few examples.

Case 1. The injury in a 59-year-old white man who almost completely amputated his penis with a circular power saw is demonstrated in Figure 1. The penis remained attached by a 5 to 6 cm lateral soft tissue bridge. The saw completely transected the corpora cavernosa and partially transected the urethra and corpus spongiosum. After the urethra and corpora were repaired, two veins and three nerves were reanastomosed. Due to the avulsion type injury, it was necessary to use the internal spermatic artery in the right cord to rearterialize

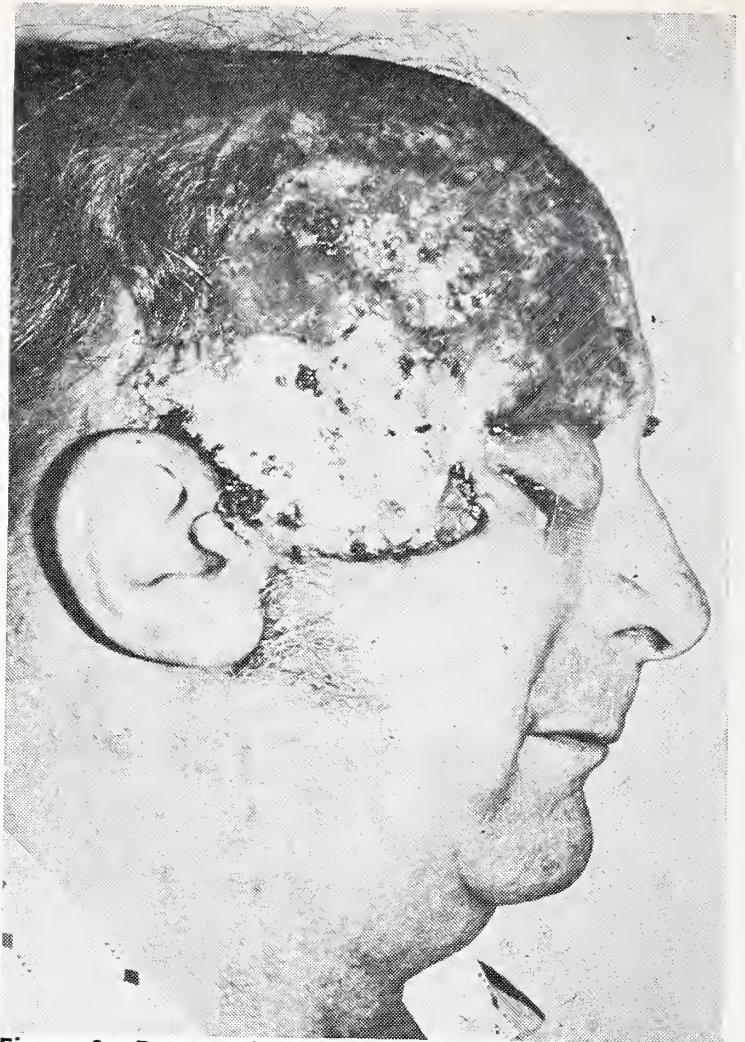


Figure 3. Preoperative appearance demonstrating extent of tumor (case 2).

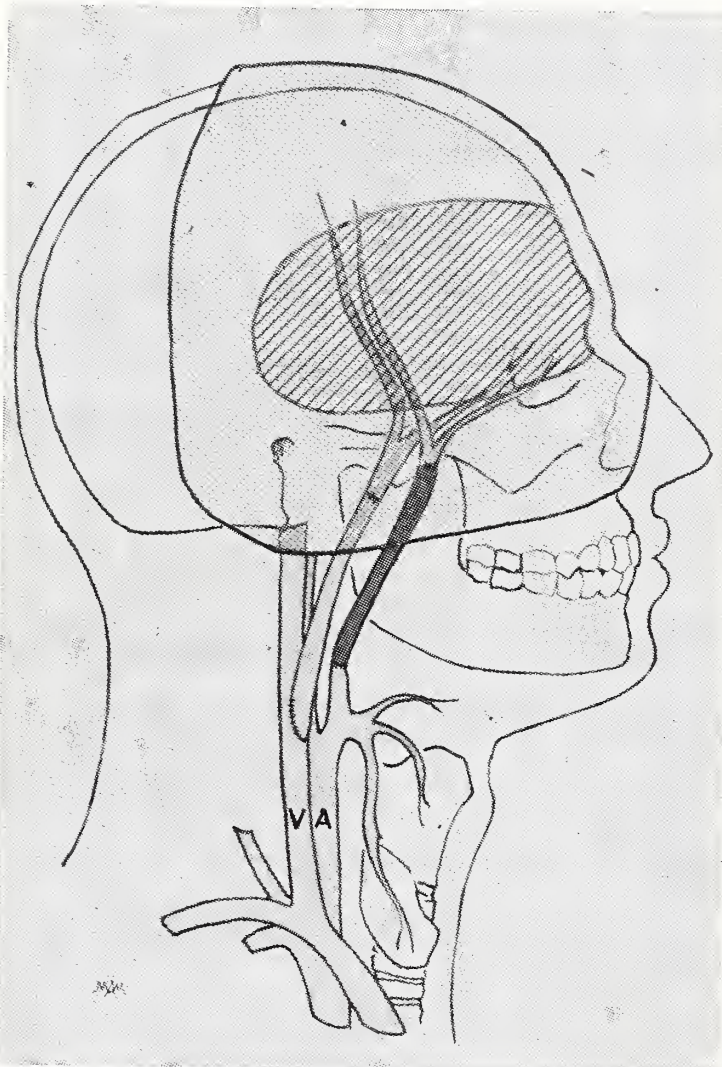


Figure 4. Schematic representation of reconstruction (case 2).
(A-arterial supply; V-venous drainage)

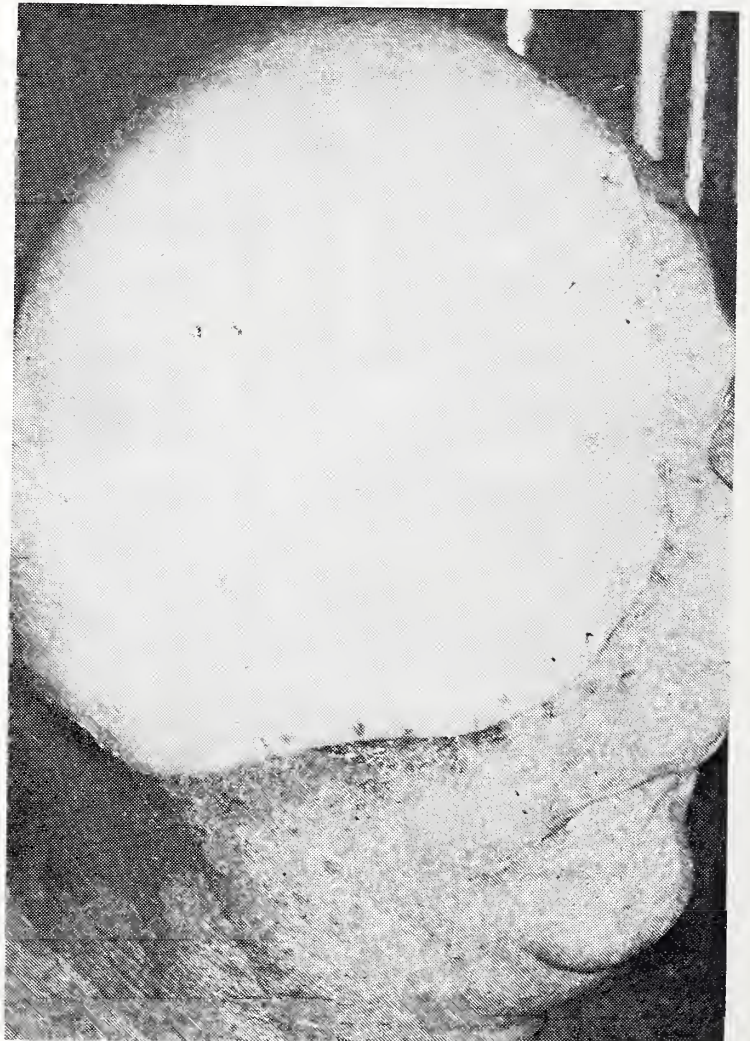


Figure 5. Appearance of flap six weeks after reconstruction of soft tissue defect (case 2).

the penis. The wounds healed without difficulty and at the present time the patient voids with a good stream, has sensation to pin prick in the glans penis, and has had full erections (Fig. 2).

Microvascular repair of penis amputation is much superior to the previously used methods of simple replantation of the penis. As seen in Table 1, the majority of other replantations not utilizing microvascular repair resulted in skin loss, problems with urethral fistula, impaired sensation and erection.⁵⁻⁷ Microvascular repair has resulted in good wound healing with return of sensation, erection, and no problems with the skin or urethra.

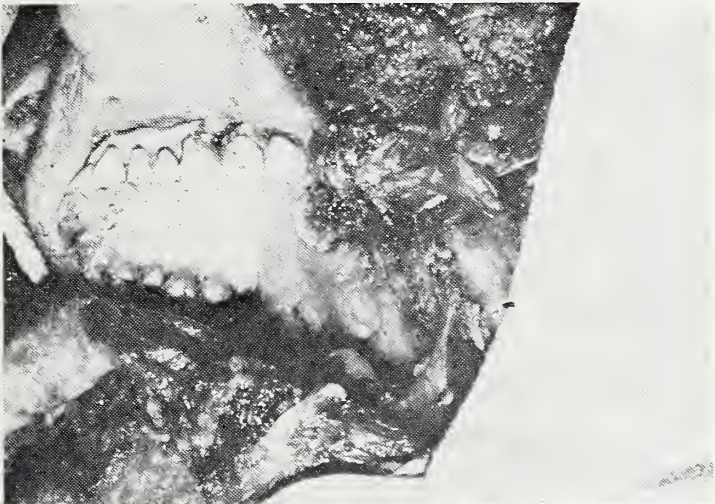


Figure 6. Defect remaining after resection of carcinoma originating in left tonsillar fossa (case 3).

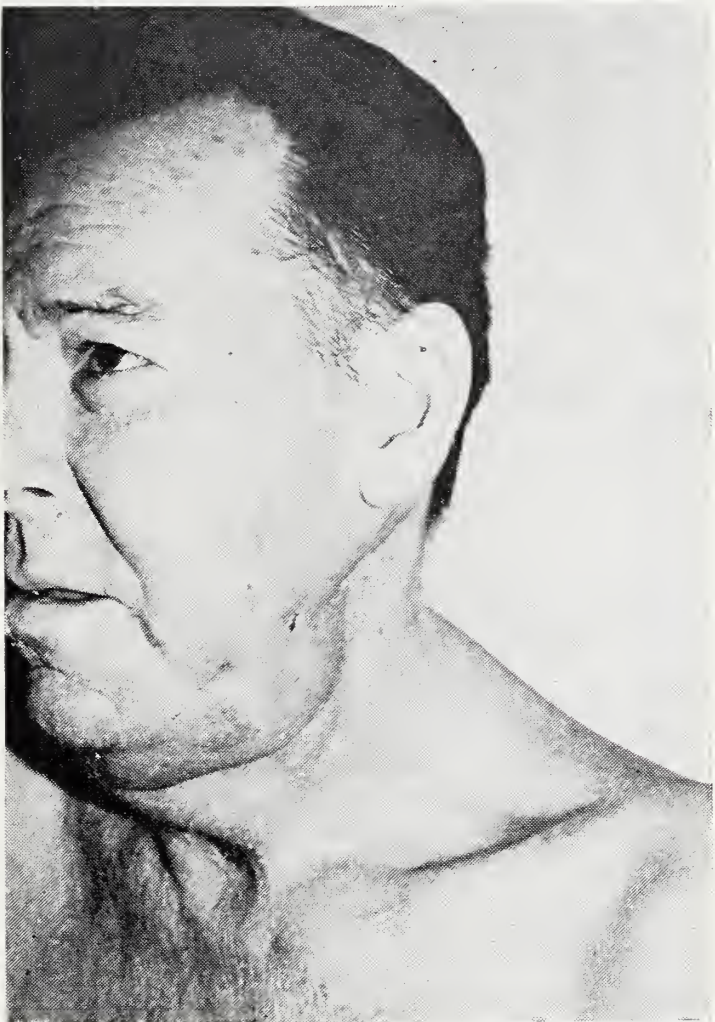


Figure 8. Appearance of patient eight weeks after single stage soft tissue reconstruction (case 3).

Case 2. The next patient is a man who had basal cell carcinoma on his scalp for a number of years that had been treated with local excisions and radiotherapy. The involvement of the skull with this tumor had been known for one year prior to the picture in Figure 3. After his eye became proptotic and painful, he agreed to undergo surgical resection.

A large soft tissue excision around the lesion was performed. A portion of his skull and underlying dura were removed in order to completely extirpate the lesion. A fascia lata graft was used to replace the dura. The soft tissue defect was closed with a large 24 x 22 cm groin flap which was revascularized using microvascular



Figure 7. Flap being inserted to reconstruct soft tissue defect (case 3).

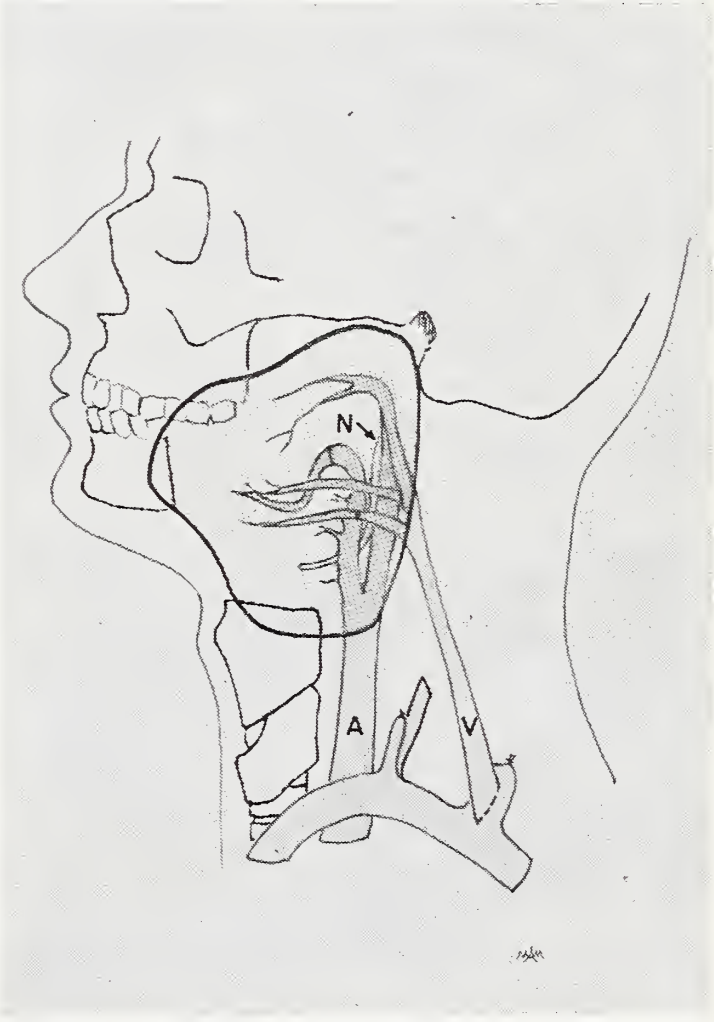


Figure 9. Schematic representation of operation performed on patient in Figure 8 (case 3).

techniques and two vein grafts. Figure 4 is a schematic representation of the operation. Figure 5 shows the healed flap in place.

Case 3. A number of head and neck reconstructions have been performed utilizing a dorsalis pedis free flap. This type reconstruction is demonstrated in a 56-year-old white man who had a large carcinoma originating in the left tonsillar fossa. Resection of a portion of his soft palate, posterior and lateral pharyngeal wall, a portion of his tongue, and a hemimandibulectomy were performed (Fig. 6). The defect was reconstructed with a dorsalis pedis free flap, which is shown being sewn in place in Figure 7. The superficial peroneal nerve, which supplies sensation to the dorsum of the foot and this flap, was reanastomosed to the stump of the lingual nerve in an attempt to reestablish some sensation in the defect. Figure 8 depicts the appearance of this patient eight weeks postoperatively. Figure 9 is a schematic representation of the operation, which demonstrates the defect reconstructed, the venous drainage of the flap going into the external jugular vein and the arterial supply coming from a branch of the external carotid artery.

Case 4. Figure 10 is the hand of a 17-year-old white man who severely lacerated his left hand and amputated his index finger. Although we do not advocate replanting a single digit other than the thumb,



Figure 10. Preoperative appearance of left hand (case 4).



Figure 11. Appearance of hand and replanted digit ten days postoperation (case 4).

this finger was replanted at the patient's request. The finger was shortened in order to perform the replant and was viable ten days later (Fig. 11). When the patient realized that other procedures would be necessary in order to make it a functioning digit, he requested amputation of the replant.

Discussion

These four patients are examples of the application of microvascular reconstructive surgery. The techniques and instrumentation for this type of reconstruction are now available. The scope of microvascular surgery is continually expanding and there are many other areas in which microvascular surgery is being applied. A few experimental examples are lymphatico-venous anastomosis for lymphedema, free muscle transfers, free bone and joint transfers, and colonic and jejunal interposition for reconstruction of the hypopharynx and cervical esophagus. There are innumerable potential applications for microvascular reconstructive surgery. The advantage of a one-stage reconstruction in patients that formerly required multi-staged transfers of tube pedicles is obvious. As more surgeons become interested and proficient in the techniques, this type of procedure will be performed more often and applied in many different areas.

Summary

Microvascular techniques have presented many new horizons in reconstructive surgery. In most instances, complete soft tissue reconstruction can be performed in one stage with a better functional result and without the need of prolonged hospitalization. The patients presented are examples of some of the applications of this method used at Vanderbilt, and this technique is being applied routinely in a variety of clinical situations.

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Bicycles, Tricycles and Continuing Medical Education

CHARLES FELZEN JOHNSON, M.D.

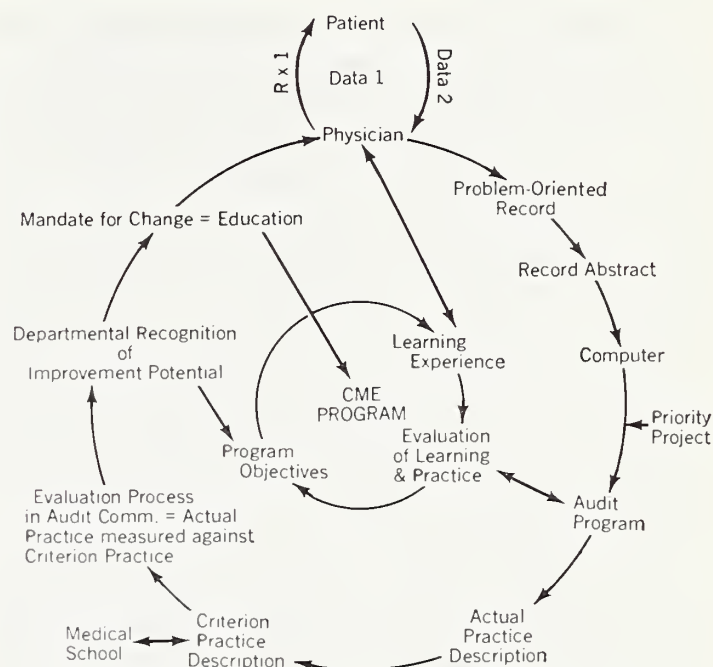
In 1970, Brown and Uhl¹ presented the "bi-cycle" paradigm as a reaction to the trend toward mandated use of traditional methods of continuing medical education (CME). The model, which has proved functional,^{2,3} has not sufficiently considered the physician as a variable in the educational process. A tri-cycle paradigm is proposed to facilitate the physician's active participation in the educational process.

In the traditional method of providing CME, the teacher decides what the learners need to know and achieves "only information transfer, implying that most patient-care deficits derive from lack of physician-learner knowledge." This traditional approach entails no measure of knowledge or skill deficit to design or evaluate programs, no active learner participation, and usually no feedback. The bi-cycle model introduces *audit of patient care* to determine the physician's educational needs. The bi-cycle model is *not* teacher or planner centered; it focuses on the patient and learner to provide a rational method of estimating the success of an educational program. According to Brown and Uhl, the final measure of success of an educational endeavor for physicians must be that *patient needs are met*.

The Bi-cycle of Brown and Uhl

Two methods were proposed to relate learning directly to patient care. The identification of specific deficiencies in hospital-based patient care was to be combined with (1) programs for correction, and (2) the establishment of a consultation communications network. The first method was visually presented as a bi-cycle (Fig. 1) in which patient care (outer cycle) relates directly to learning or education (inner cycle). Both cycles and data for the design of educational programs are generated from the interaction between the patient and his physician-learner. To simplify understanding of the bi-cycle theory for CME, I have applied the mnemonic A-U-D-I-T to the various steps of the outer patient care cycle (Fig.

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The Bi-cycle; Relation of Patient-Care and Education Cycles I

Figure 1. This paradigm was proposed in 1970 by Brown and Uhl¹ to emphasize the need to relate audits of patient care to the design of CME programs.



The Bi-cycle; Relation of Patient-Care and Education Cycles II

Figure 2. In order to facilitate understanding of the paradigm illustrated in Figure 1, the mnemonic AUDIT is applied to the various stages leading to the generation of educational programs (PIE). Ideal practice profiles are compared to actual patient care histories of high priority diseases to uncover practice deficits. The educational effort is aimed at correcting these deficits.

2). The patient-physician interchange (A = arena) is also the site where the evaluation of a physician's educational need takes place—the *arena* toward which problem-oriented educational programs are directed.

The first phase of the bi-cycle theory (U = uncover) requires a study of hospital admissions to establish a system of priorities. Which diseases result in the most disability to the patients? Variables to consider when establishing priority diseases include length of stay, days in special care units, complications, morbidity and mortality. Data from problem-oriented records (1) are abstracted (2) and placed in the computer (3). The computer determines the total disability for each disease and ranks the diseases by the amount of disability they cause. From this, ranking priority projects (4) are selected. The priority projects are those with the most *preventable disability*.

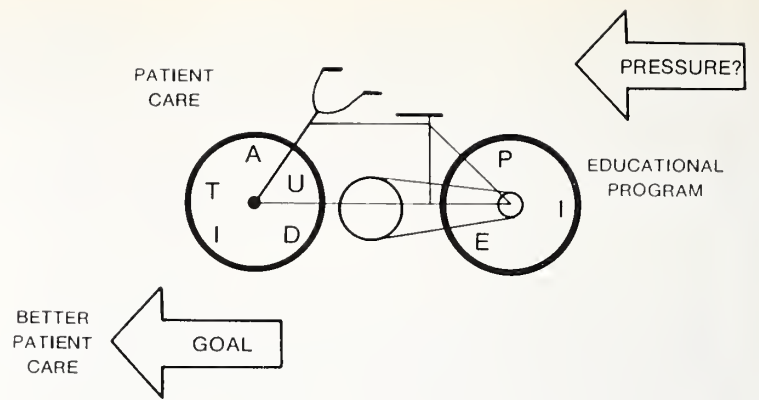
The second phase of the bi-cycle theory (D = determine need) involves comparing the actual practice descriptions (5), or actual care histories, with criterion practice descriptions (6). Criterion practice descriptions are ideal management programs established by audit committees within the hospital. They may be validated by comparison with ideal management programs established by hospitals associated with medical schools.

This evaluation process (7) in which the actual practice description (5) is compared with the ideal or criterion description (6) uncovers those situations in which the established standards are not being met.

These discrepancies or improvement potentials are then communicated to appropriate individuals (I = inform). Mandates for change or education (T = teach) generate the CME program. In the bi-cycle model, CME programs are generated by this AUDIT process. The CME programs may be represented by a second mnemonic, the educational PIE, consisting of P = planning (program or objectives), I = implementation (the actual learning experience) and E = evaluation.

From Bi-cycle to Bicycle

The inner and outer "cycles" of the bi-cycle can be separated and graphically "assembled" into a bicycle (Fig. 3) in which *patient care* (AUDIT) becomes the *leading* wheel and the educational program (PIE) becomes the rear wheel. This graphic representation reveals several



Impelled CME Bicycle I

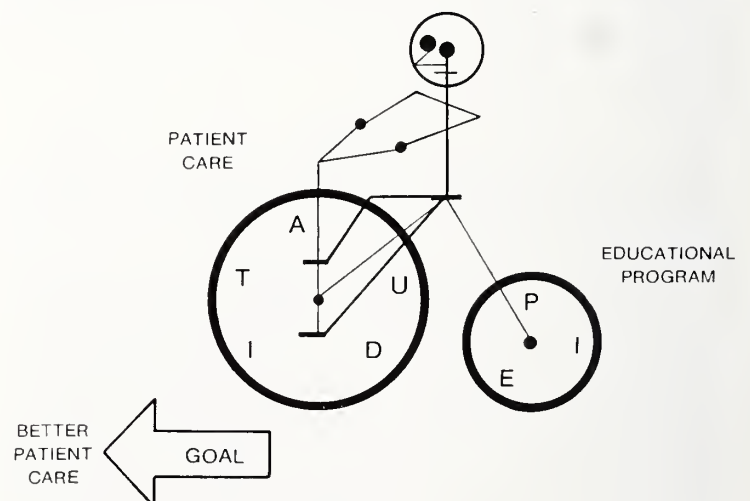
Figure 3. The bi-cycle from Figures 1 and 2 has been rearranged to form a schematic impelled bicycle in which the audit "steers" the educational program and unknown sources provide pressure for change.

previously hidden philosophical questions. Now that we have a bicycle we need a source of energy for movement and/or motivation. What is the physician's role relative to this bicycle? Is the physician to be pushed along as an *unwilling* passenger—pressured by threatening programs which demand relicensure? Or is the physician to assist in steering, to be *self-motivated* and to move *voluntarily* toward the ultimate goal of better patient care?

Will the audit be controlled by the physician or by an outside source such as the state or federal government, or state or national boards? Is motivation to be directed only to the rear (educational program) wheel, or should the cyclist be moved by learner energy applied to the leading or AUDIT wheel (Fig. 4)? Should or can physicians guide their own audits?

A Physician to the Defense

Our bicycle lacks a stabilizing factor. This variable became apparent during a meeting of



Self-Propelled CME Bicycle II

Figure 4. The bi-cycle can also be represented as a front wheel bicycle in which the learner applies energy for his own audit.

hospital administrators, auditors, nurses and physicians which was sponsored by the Office of Continuing Medical Education at the University of Iowa in 1976.

The meeting was intended to be a dialogue of mutual concerns in which the following provocative topics would be discussed: "The Hospital as an Education Center"; "PSRO and Education"; "Insurance Carriers, Should They Pay, Will They Pay?"; "The Role of the Hospital in Public Education"; and "How Can We Take Better Advantage of our Resources?"

Each discipline tended to defend its own position. All implied that the government and/or Medicaid/Medicare should be more supportive, and many individuals prodded or directly attacked physicians for their lack of sensitivity, their mercenary behavior and resistance to audit and education.

Physicians were reprimanded because "they didn't care about continuing education." They were allegedly too busy to take the time and resisted audit as an intrusion into their privacy. The unrealistic expectations for the physician as a learner were that the physician *should* welcome audit, exposure, peer review and relicensure. If these factors were not welcomed, they should be forcefully encouraged or legislated.

I countered with the pediatric advice that I give to parents who, by yelling, nagging, and spanking, are frustrated by their inability to change undesirable behavior in their children. Children can behave like mules—you can push all day from the rear, and the only "movement" you may get is *not* what you intended. The effort expended in obtaining the intended behavior may be so extreme as to cause parental exhaustion, anger, and even child abuse. If you want forward progress with children, you must try rewards and incentives (carrots and *apples*), listen to the child, put yourself in the child's place and *think child*. If you wish to educate, you must *think learner*.

Think Physician-Learner

Efforts to improve medical care often take the onus for change away from physicians. Educators are not asking *individual physicians* what system they want, like, or even what they *believe* works best for them. We have not audited the cost of audit, recertification and reeducation. We do not know who will pay. We do not know if audit and recertification will decrease the incidence of malpractice. Will the effect of patient care quality

assurance on practice performance be permanent? Perhaps we need to apply principles of child development⁴ to *physician* development! We must think physician; we need to find the carrot or *apple* of motivation which will lead to cooperative, comfortable, lasting behavioral changes.

From Bi-cycles to Bicycles to Tricycles

Although some parents teach their children to swim by throwing them into the water,⁵ there are children who will react with a lifetime fear of water—and resentment toward their parents. Wise and experienced parents and teachers suggest that the child place a toe in the water before attempting total immersion. They then reward every "step" on the way to swimming.⁶ Just as children crawl before walking, they learn on a *tricycle* before riding a *bicycle*. A tricycle, after all, is just a bicycle with a *training wheel*—a "toe in the water" approach. Initial successes on a tricycle give children the confidence to remove the training wheel and pedal off on two wheels, alone. I suggest that the CME bicycle, if it is eventually to be successfully guided and propelled by the physician, must also have a *third wheel*, a third wheel which will facilitate easy movement toward the educational goal of improved efficient *patient care*. This *third wheel* is the *physician variable* (Fig. 5).

The mnemonic of the educational wheel of the bicycle spells out PIE; the training wheel spells out APPLE. Now there is a workable mnemonic! Physicians are no longer being "taken

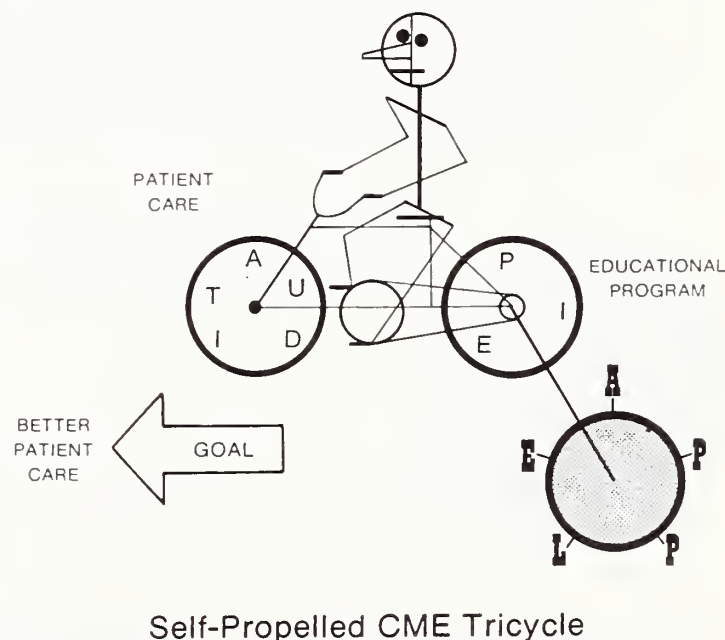


Figure 5. The self-propelled CME tricycle strongly emphasizes the need to consider the needs and learning styles of the learner in any educational endeavor. The third, or training, wheel (APPLE) provides support for the learner and balances the educational program (PIE).

for a ride"—but now have the opportunity to balance their educational program relative to personal needs and abilities. The physician can also provide some direction. The *tri*-cycle of CME considers the *physician* as an adult learner.⁷ The third wheel includes five areas of concern:

1. Audit: The audit should be performed in a nonthreatening, nonpunitive, efficient manner. Audits of groups can be fed back to groups; however, audit of individual physicians must be personal and private. This suggests that, in small hospitals or groups, the auditor must be an objective outsider.

2. Physician: In planning any educational program, one must consider individual learning styles, personality differences, and the actual practice style of the physician. Is there adequate time for continuing education? If not, how can time be made available? Will it be necessary to have *locum tenens* physicians practice for those physicians who are participating in continuing education? How does one motivate a particular physician to participate actively in audit and continuing education? Studies are needed to determine the most effective ways of motivating physicians. *Individual* physicians may know more about their own effective and comfortable styles of learning than a bevy of experts. Does the physician learn best by tapes, slides, videotapes, patient problem-solving activities, participation in conferences, lecture methods, or through combinations of many styles? Is *variety* an antisoporific? Which approaches best teach and measure cognitive, psychomotor and affective skills?

3. Payment: Who is to pay for the continuing education of the physician? Will this come from the physician's own pocket or from governmentally subsidized continuing education programs? Do Blue Cross, Blue Shield, Medicaid or Medicare have a role? Ultimately, the patient will pay. Education must become cost-effective.

One must be sure that the second "p" in apple does not stand for punishment. The major incentive for participation in continuing education must not be to avoid ridicule and loss of practice privileges. Is there any evidence that to teach by terror or threat is an effective motivator? If it motivates *study* to pass a test, will it change behavior? Will the changed behavior result in better patient care? Will physicians leave the practice of medicine in response to pressure?

How do we and can we audit psychomotor and affective behavior?

4. Local: Educators must consider the busy schedule of the practicing physician. More educational programs must come *to* the practitioner. A program using visiting consultants—professors who round with the physicians and see patients in consultation—fulfill many of the criteria. "Canned" programs, which utilize accessible, efficient and convenient audiovisual modes, must be prepared in consideration of the needs and resources of individual physicians. Some audiovisual materials require sophisticated playback equipment which might not be available to the small community hospital and practitioner. Rural physicians may respond to canned presentations better if there is access to a consultant after the presentation, either in-person or via phone. There is a need to train *local* directors of CME. They must be ready to confront the problems that face the full-time "professional" educator. There is a need to *train* physicians to be educators of other practicing physicians. This should begin in medical school.

5. Efficient: If educational programs are to be acceptable to the practitioner, they must be efficient and consume a minimal amount of time. In order to help local programs become more efficient, they must be evaluated by the *consumer*. Physician feedback must be solicited for the various educational endeavors being utilized. This includes an evaluation of programs which are brought to the community by visiting professors as well as evaluation of the "canned" programs. Efficiency implies that the practitioner who asks for a "personal professor" will no longer receive an inappropriate lecture on some exotic topic of interest to the academician, but rather a discussion of topics *selected by the practitioner* as a result of audit of need. Efficiency also implies a communication between national agencies, the federal government, the medical school, and local continuing education agencies.

The tricycle symbol represents not one, but many individualized tricycles. There is a customized tricycle for each physician, progressing at individual rates, along a variety of routes, with the ultimate goal being documented improvement in patient care and satisfaction. There is evidence that the institution of a system of patient care quality assurance is feasible, and when successful, results in documented improvements in desired patient care behaviors.² We must not, how-

(continued on page 352)

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Helping Troubled Patients See What They Need and Find What They Seek

ROBERT PRESTON HORNSBY, M.D.

"When all else fails, draw a picture"; even better draw the picture as you explain a tough proposal to your patient. Nowhere has "doodling" served me better than in the tricky situation of (1) explaining an emotional problem to my patients, and (2) showing exactly how the counselor, to be consulted, can help.

I begin by sitting down beside my patient, with a paper, pencil, and clipboard. I explain that I am about to sketch for both of us a sort of "picture of the inner self": the self that has no words, but lots of feelings. I ask the patient to let me know when and if he spots himself in the picture. Then we begin together to develop the sketch, with ad lib input from my patient and positive feedback from me. But mostly I do the talking as the sketch evolves.

One slash demarks the upper left corner of the paper; another slash, the upper right corner. These are two of our "hidden, secret" corners, and we are turning back the cover to see what has been hidden (Fig. 1). A number of terms can be written into the upper left corner: "hopes," "dreams," "ambitions," "needs," "wants," "expectations." But in the upper right corner, I write the word "Reality." What I want and where I want to be is upper left; what I get and where I really am is upper right. There is a separation between the corners; here narrow (higher up the page); here wide (lower). The wider the separation—and the more sense of loss, failure, frustration—the more I hurt. Between the corners, or out in the middle of the "fightin' ring," as it were, I write "HURT" in large letters. I mention that, normally, we all have a daily ration of hurt and a daily need to sack it up like garbage and carry it out for safe disposal.

Now, then, in a few lucky families are persons who—quite untaught—"learned" at home, as children, how safely and regularly to carry out the day's garbage of hurt. Probably for several generations, their families of origin "had it all together," and growth proceeded in an atmosphere of patience, love, confidence and trust. Daily

hurts were cared for; people were cared about. Hurt was sacked up, carried out, recycled, and gone. It was not left to fester and worsen. This is graphically indicated with a righthand fork in the path, as our sketch evolves down the page.

But what about folks who take the lefthand route? As this line is drawn, it is labeled. "Hurt held in and piled on"; the path becomes an arrow ending in the word "ANGER" in large letters. I mention that it takes a lot of unconscious energy to hold hurt inside. Holding it in does no good, and some harm, and we grow anxious; we begin to find it hard to relax; we may turn into "busybodies."

Then we draw another path with right and left forks down the page. The righthand arrow, labeled "out and gone," refers to anger ventilated, daily, on time, safely, with damage to no one. The lefthand arrow, labeled "held in and piled on," points to the lower left corner of the page, where one can write "depression" (a result of pent-up anger). I mention that people will do almost anything to counter depression. Even with teenagers, I mention the distractions of nightlife, alcohol, sex and drugs, and how hard it is to "get going" in the morning, and how tired we feel, and how useless, and how bad, and how worthless. And how some of us, in our misery, just keep stirring up trouble simply to avoid depression.

And by now the body systems are complaining: spastic colon, perhaps; backaches; emotional asthma; peptic ulcer disease; migraine; sometimes chronic urticaria and neurodermatosis; hypertension; and so forth. These are mentioned only when an individual patient can identify promptly with one or more of these problems, initially considered "medical," but failing to respond to conventional medical management in a succession of medical and surgical offices. (By the way, this is how I, an allergist, get myself into such a train of events.)

If by now the patient is visibly or verbally identifying with the lefthand divergent pathway of my little sketch, I ask him if he really wants to get things turned around—to begin to operate efficiently and effectively at the very center of his

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feeling self, and begin to enjoy life. If the answer is *yes*, or even *maybe*, I proceed to indicate, with asterisks on the sketch, exactly where the counselor, or skilled helper, intervenes.

First, upper left corner: an asterisk here. This refers to honest self-appraisal, admitting the strong points as seen by our impartial observer, the coach-counselor. Then, the upper right corner: a coach-assisted reevaluation of one's own particular reality; a second asterisk.

Next, awareness of and distinction between hurts real and imagined. The asterisk again, in the direction of "Hurt out and gone," representing safe, effective, new ways of handling hurt to avoid bottling it inside and covering it up. Fur-

ther down the sketch, we place another asterisk for productive management of anger.

Finally, in the bottom righthand corner, the role of the coach-counselor is further explained: he (or she) is a friend, an impartial referee, a stimulator, a helper, a cheerleader—but *not* a prime mover. The coached patient must do the work. If counseling is to be individual, we develop another analogy, that of changing life-long habits of "dog-paddling"—barely keeping head above water—one learns to swim, and not just in one mode. With good coaching, several effective strokes may be mastered. "Life can be beautiful" or at least a lot better.

When I perceive couples counseling to be sine

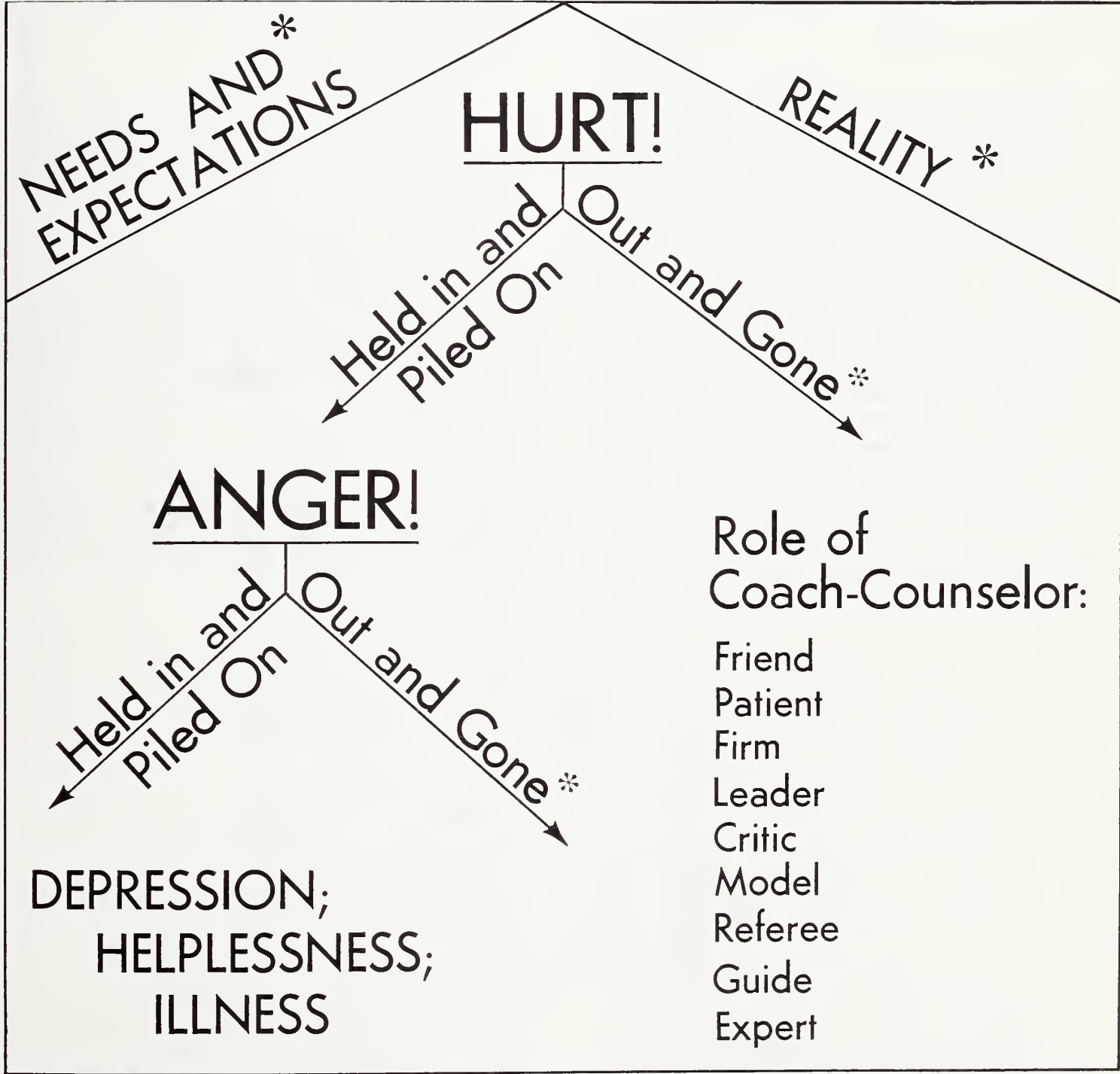


Figure 1. Sketch of "picture of inner self" and role of the coach-counselor.

TROUBLED PATIENTS/Hornsby

qua non for health, I use another analogy—that of tennis, with the spouse as tennis partner. After coaching sessions, budding skills may be practiced daily, consciously, until new living skills become second nature. It's the joint practice that pays off. I find similar utility for this analogy when the prescription is for family counseling, or parent/child counseling.

The sketch is complete. I have found that by now my patient is not as confused, as resistive, as reluctant to accept referral for counseling after this orientation session. It may take 30 minutes

to do this; it may take an hour, especially when sitting down with a couple or with a child and a parent together. Armed with this sketch, I have assurance and confidence, and I communicate this to my patients without really trying. But more than that, the process gives my patients a tangible, painless concept by which to lever themselves away from a static or downward drift in personality development and onto an escalator offering reasonable hope. For me, it works. It may work for you. By “depersonalizing” the problem—getting it “off the chest and onto the paper”—it defuses edgy resentment, when present, in either patient or me.

CME . . .

(continued from page 348)

ever, in our haste to improve patient care, neglect the satisfaction of the physician-learner if we are to make the CME system viable. All individuals involved in CME must maintain two-way channels of communication.

The bi-cycle concept, by introducing audit of patient care to determine the physician's educational needs, is a useful concept. Provision of a third or “training” wheel to the bi-cycle paradigm will hopefully improve the *attitude* of physicians towards CME by considering their individual professional and learning needs and styles in the preparation, presentation and evaluation of educational programs.

Acknowledgements:

Figure 1 and Figure 2, which was modified from

Figure 1, are reproduced with the permission of the authors (Brown, CR, Uhl, HSM) and the *Journal of the American Medical Association* (213:1660-1668, 1970). Copyright 1970, American Medical Association.

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"He's already taken something for the pain."

Multiple Myeloma

F. ANTHONY GRECO, M.D., Editor

Plasma cell myeloma or multiple myeloma is one of several lymphoproliferative disorders. During the past decade, our understanding of the growth characteristics of myeloma as well as the pathophysiology of associated complications is improving. By better understanding the biology of this and other malignancies, our ability to help patients will also improve. Dr. Stanley E. Graber will present a patient with an unusual biclonal myeloma, followed by continued discussion of multiple myeloma.

STANLEY E. GRABER, M.D.:

The patient is a 65-year-old white man who was diagnosed as having multiple myeloma in 1971 at Grady Memorial Hospital in Atlanta. He was treated with two courses of melphalan (Alkeran) and prednisone and subsequently lost to follow-up. The patient was next seen at the Memphis VA Hospital in September, 1973. Work-up showed a serum IgG-kappa monoclonal protein, 13% plasma cells in the marrow, no lytic bone lesions, and no Bence-Jones protein. Rectal biopsy was negative for amyloid, and a liver biopsy showed focal fibrosis thought to be most compatible with, but not diagnostic of, portal cirrhosis. His monoclonal gammopathy was thought to be stable and no therapy was given. The patient failed to keep a hematology clinic appointment and was next seen at the Decatur VA Hospital in December, 1973. The serum IgG concentration was found to be greater than 4,000 mg%, while the serum calcium ranged from 10.9 to 11.3 mg%. Total protein was 9.1 gm% with an albumin of 2.5 gm. However, bone marrow showed only 9% plasma cells, and no lytic lesions or Bence-Jones protein were found. No chemotherapy was given and the patient was next seen at the Nashville VA Hospital in July, 1974. He was admitted because of modest hypercalcemia. Again, work-up showed an IgG-kappa paraprotein and a modest increase in marrow plasma cells not felt to be diagnostic of multiple myeloma. No chemotherapy was given and the patient was lost to follow-up until January, 1977, when he returned to the Nashville VA Hospital because of hematuria and a considerable amount of bone pain located primarily over the anterior rib cage and mid to lower back. Work-up of the hematuria was negative and it cleared spontaneously. X-rays demonstrated lytic lesions in the left clavicle and ribs plus a compression fracture of T-12. Repeat bone marrow was diagnostic of multiple myeloma, and reexamination of his serum showed two distinct paraproteins. In addition to the IgG-kappa paraprotein, an IgA-lambda M-component was identified.

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Moreover, for the first time the patient's urine contained a lambda light chain. Other laboratory data of interest include a white cell count of 11,800/mm³, normal differential, hematocrit 36.7%, platelets 290,000/mm³, total serum protein 6.5 gm%, albumin 2 gm%, calcium 9.5 mg%, uric acid 6.4 mg%, creatinine 1.5 mg%, bilirubin 0.5 mg%, alkaline phosphatase 184 IU, and SGOT 102 KU. Treatment consisting of ambulation, fluids, and a four-day course of melphalan and prednisone was given, and the patient was discharged to be followed in the hematology clinic.

Comment

This patient exhibits several manifestations of multiple myeloma, both usual and unusual. Specifically, the bone pain and lytic lesions, which led to his last admission, are quite typical, and in fact bone pain is the most common presenting complaint of patients with multiple myeloma. On the other hand, the development of a biclonal gammopathy is distinctly unusual. In one series of 351 cases of multiple myeloma only one case (0.3%) was biclonal.¹ It would be of interest to know whether in our patient the two paraproteins were being produced by the same plasma cell clone or whether two different clones of plasma cells were present, each producing one M-component. Both situations have been reported.^{2,3} Unfortunately, we were unable to obtain the appropriate immunofluorescent studies to resolve this question.

Discussion

Lymphocytic stem cells reside in the bone marrow and give rise to lymphocytes that can be activated either by the thymus and become T cells or by the bursal equivalent in the human to become B cells. T cells are responsible for cellular immunity, i.e., delayed skin reactions, graft versus host reactions, and allograft rejection, while B cells give rise to humoral immunity. When stimulated with antigen, B lymphocytes differentiate into B cell effector cells or plasma cells, whose primary function is the secretion of immunoglobulins (humoral immunity).

There are several disorders of plasma cells, which result in excessive production if immuno-

globulins or hypergammaglobulinemia. They can be classified into basically two divisions, polyclonal and monoclonal gammopathies. Polyclonal gammopathies are simply the reaction of many different clones of plasma cells to some or many antigenic stimulants. This results in the production of many different types of antibodies (immunoglobulins) of varied heavy and light chain type from many different clones; thus, the name polyclonal gammopathy. Examples include almost any cause of chronic inflammation such as chronic active hepatitis, tuberculosis, or rheumatoid arthritis. The monoclonal gammopathies are characterized by production of a single type of immunoglobulin molecule (M-component, paraprotein) presumably from a single clone of plasma cells. They can be further subdivided into benign monoclonal gammopathy and multiple myeloma. In benign monoclonal gammopathy a single clone of plasma cells proliferates with production of a paraprotein. However, growth of the clone is limited (under some type of control), and no symptoms can be attributed to the aberrant clone. Typically, the number of plasma cells in the marrow is less than 20%, and nodules are not found. The paraprotein level is generally less than 2 gm%, bone lesions are absent, nonparaprotein immunoglobulin levels are within normal limits, and there is no progression. The last category is multiple myeloma, which is a definite malignancy of the plasma cell. This tumor is characterized by proliferation of plasma cells in an uncontrolled manner. The tumor cells almost always produce a homogenous paraprotein or M-component; thus, the tumor appears to arise from a single cell. There is a marked predilection for involvement of the bone marrow and bone, and the marrow typically contains large numbers of plasma cells in sheets and lumps. The disease is generally progressive, leading to

the death of the patient within 6 to 24 months if no treatment is given.

The pathophysiology of multiple myeloma is outlined in Figure 1. First, tumor growth in marrow and bone can produce anemia, thrombocytopenia, bone destruction, hypercalcemia, and renal failure on the basis of the hypercalcemia. The pathogenesis of the lytic bone lesions and hypercalcemia is more complex than simply tumor growth and pressure necrosis. Recently, Mundy et al⁴ have reported that myeloma cells secrete an osteoclast activating factor, which may be responsible for the reabsorption of bone. This concept is strengthened by the finding of multiple osteoclasts lining lytic bone lesions in some cases of myeloma. Second, the production of the paraprotein, particularly if a significant quantity of free light chains is present, may have direct toxic effect on the kidney leading to renal failure. In addition, the paraprotein may form a complex with plasma clotting factors or coat platelets to produce a bleeding diathesis, or if present in high enough concentration, may result in the hyperviscosity syndrome. Third, for reasons not completely understood there is a striking decrease in production of normal immunoglobulins, which leads to a markedly increased incidence of bacterial infection. The high incidence of kidney disease can be easily understood. The toxic effect of light chains on the renal tubule, increased susceptibility to bacterial infection (pyelonephritis), and hypercalcemia may singly or in combination produce renal failure. Moreover, the mechanisms outlined above clearly explain the clinical findings of bone pain, renal disease, bacterial infection, and anemia so often seen in patients with multiple myeloma.

Multiple myeloma is unique, in that it is the one human tumor in which kinetic measurements of the tumor cell number have been made. In

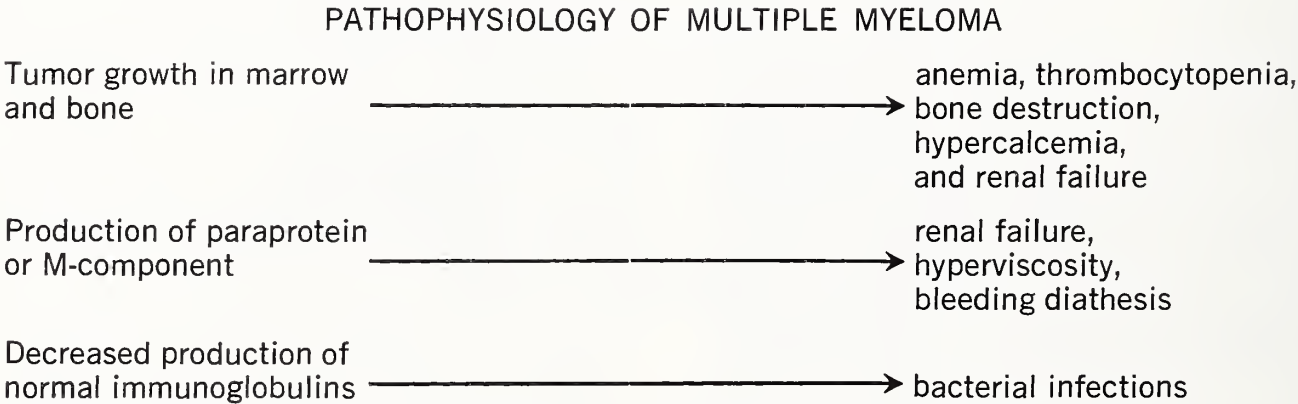


Figure 1. Pathophysiology of plasma cell myeloma.

order to understand the significance of these studies and their possible implications for therapy, it is necessary to understand what is meant by the cell cycle. Cells, including normal cells and tumor cells, can be described as either growing or not growing. If cells are not going through cell division, they are said to be resting or in the G_0 state. If they are growing, the cycle they go through while dividing can arbitrarily be split into four different components. The time from the end of mitosis to the beginning of DNA synthesis is termed the G_1 phase, while the time in which DNA synthesis occurs and the chromosomes are being reduplicated is called the S phase. The time from the end of the S phase to the beginning of actual mitosis is called G_2 , and the time in which mitosis takes place is called the M phase. Chemotherapeutic agents may act at different times during the cell cycle. Some agents, which are said to be cycle-dependent, affect only cells in cycle. For example, agents that affect cells in the S phase include 6-mercaptopurine, methotrexate, and cytosine arabinoside. All these drugs have some effect on inhibiting DNA synthesis. Agents which affect cells in the M phase include vincristine and vinblastine. They are microtubular poisons that block mitosis. Other drugs act independently of the cell cycle, i.e., they can affect nondividing cells that are in G_0 . Nitrogen mustard is the prototype of this group of drugs, which include melphalan and cyclophosphamide. These drugs are able to injure resting (nonduplicating) DNA and are called the alkylating agents. The number of cells in cycle varies in different tumors. For example, some tumors like Burkitt's lymphoma have a very large percentage of cells in cycle, as high as 90% to 99%. Other tumors such as multiple myeloma, at least at the time of initial diagnosis, generally have very few cells in cycle (3% to 4%). Therefore, cycle-dependent agents would probably not be very effective in the initial therapy of myeloma.

Several features of multiple myeloma have allowed estimates of the tumor burden and the rate of growth of the tumor in humans. As previously discussed most myeloma cells secrete a characteristic product, i.e., a paraprotein or M-component. This M-component can be measured in serum or urine, and the metabolism of immunoglobulins and M-components has been well characterized. Moreover, the quantity of an M-component in a given patient varies as a function of the mass of the neoplasm, and by

$$\begin{array}{c} \text{Total Body} \\ \text{Tumor} \\ \text{Cell} \\ \text{Number} \end{array} = \frac{\begin{array}{c} \text{Total Body} \\ \text{Paraprotein Synthetic Rate} \end{array}}{\begin{array}{c} \text{Cellular} \\ \text{Paraprotein Synthetic Rate} \end{array}}$$

Figure 2. Measurement of total body tumor cell number in multiple myeloma (after Salmon⁵).

aspiration of the bone marrow, myeloma cells can be readily obtained. Using these characteristics, Salmon⁵ was able to quantitate the tumor cell mass in patients with multiple myeloma as outlined in Figure 2. Both the total body M-component and the cellular M-component synthetic rate of the patient were determined and their values divided. If these determinations were done correctly, Salmon reasoned that the resulting quotient should equal the total body myeloma cell number. The total body synthetic rate was measured by following the disappearance of a radioactive M-component tracer from the patient's plasma. By doing this, the rate of destruction and production (synthetic rate) of the M-component could be calculated. The cellular M-component rate was measured by aspirating the marrow, determining the number of plasma cells that were present in the aspirate, putting this aspirate into tissue culture and measuring the amount of paraprotein synthesized in the culture. By dividing the amount of paraprotein produced by the number of plasma cells present, the amount of M-component produced per plasma cell per unit of time could be calculated. Using this technique, quantitative estimates of the tumor cell mass in many different patients with myeloma and serial measurements in the same patient both before and after treatment were made. Thymidine studies to determine the percent of cells in cycle were also done. The result indicated that the tumor cell mass at the time of diagnosis was in the range of 0.5 to 1.0×10^{12} cells, and that the doubling time of the tumor at diagnosis ranged from four to six months. Death usually occurred when the tumor burden reached 4 to 5×10^{12} cells, i.e., 5% to 7% of the body weight, and the fraction of cells in cycle at the time of diagnosis was approximately 3%. Moreover, there was a good correlation between the tumor cell number and the extent of bone disease. If the tumor burden was less than 1.5×10^{12} cells the patients had no bone disease or only osteoporosis; whereas, if it was in the range of 3×10^{12} cells frank lytic lesions were generally present.

The above results raise some interesting questions about myeloma growth. Since it takes 40

doublings to go from one cell to 10^{12} cells and since the doubling time at diagnosis was found to be four to six months, the length of time assuming constant growth from the initial malignant transformation of a single plasma cell to diagnosis would be 13 to 20 years. Several factors suggested that this preclinical "iceberg" was excessive and that multiple myeloma growth was not constant (exponential). First, the generation time for individual myeloma cells was in the order of one to three days and not six months. Moreover, the myeloma doubling time decreased in patients if the tumor mass was significantly reduced by therapy. Successful therapy could reduce the tumor mass about 1 to $1\frac{1}{2}$ logs but no more despite continued treatment, and the proportion of cells in cycle increased from 3% to 30% when the tumor burden was reduced by treatment. Finally, in most animal models tumor growth could best be described by a Gompertizan growth curve, i.e., a growth curve in which the rate of tumor growth was not constant, but decreased as the total tumor mass enlarged. When Gompertizan mathematics were applied to Salmon's data, an entirely different growth curve was generated and the estimate of the preclinical "iceberg" for multiple myeloma declined from 20 years to 300-400 days.

To test the Gompertizan theory, Salmon attempted to predict what would happen to the tumor cell mass in a patient responding to myeloma therapy. Using only several early serial measurements of the tumor cell number, he was able to accurately predict the rate of decrease in the tumor cell mass, that the tumor cell mass would plateau and at what point the plateau would occur. From a biological point of view, an explanation for this plateau response of the tumor to treatment can be related to the number of myeloma cells in cycle. As the tumor cell mass was decreased by the chemotherapeutic agent, more and more cells began to cycle. Ultimately, a point was reached in which the tumor cell kill was being exactly balanced by the generation of new tumor cells. This represented the plateau (equilibrium) below which the tumor mass could not be further decreased, unless the chemotherapy could be increased or modified. This finding that myeloma probably follows a Gompertizan growth curve (growth slows as the tumor mass increases) has certain implications regarding therapy. At the time of diagnosis the tumor mass is large and only a

TABLE 1
APPROACH TO THERAPY IN PATIENTS WITH
MULTIPLE MYELOMA

General Measures
Ambulation
Proper hydration
Hypercalcemia
Hydration
Furosemide and IV NaCl
Prednisone
Infections
Proper cultures and antibiotics
Hyperviscosity Syndrome
Plasmaphoresis
Chemotherapy
Cycle-independent agents
Cycle-dependent agents
X-ray Therapy

small fraction of cells are in cycle. Therefore, only cycle-independent drugs such as alkylating agents are effective initially. However, as the tumor mass decreases with response to treatment more cells go into cycle, and at this point cycle-dependent agents may have a role in treatment.

A plan for approaching therapy in an actual patient with myeloma is outlined in Table 1. Two general measures, ambulation and hydration, are extremely important and cannot be over-emphasized. The bedfast patient is subject to a vicious cycle. As he lies in bed, bone dissolution accelerates, leading to hypercalcuria, dehydration, hypercalcemia, and more bone pain. He tends to stay in bed because it now hurts more to walk. The hypercalcemia and dehydration then progress to renal failure. Clearly, a major goal of treatment is to get the patient up walking and taking in large quantities of fluid. As described above, hypercalcemia is a frequent complication of myeloma. Often it can be controlled by hydration and ambulation followed by specific chemotherapy. However, more vigorous measures are sometimes necessary. Furosemide (Lasix) combined with IV saline will often control hypercalcemia at least temporarily.⁶ Prednisone may also be useful on a short-term basis. This agent has recently been shown to interfere with the action of osteoclast activating factor on bone.⁷

Bacterial infections are often another major problem, as myeloma patients produce only very small quantities of normal immunoglobulins. Thus, it is very important to aggressively work up any fever with proper cultures and treat with the appropriate antibiotics. Prophylactic gammaglobulin injections have been tried, but on a statistical basis have never been shown to be of any benefit. Occasionally myeloma patients

will have high enough serum paraprotein concentrations to produce hyperviscosity. This is much more common in Waldenstrom's macroglobulinemia, a disorder characterized by proliferation of lymphocytes with a variable component of plasma cell differentiation and usually IgM paraprotein production. However, hyperviscosity does occur in multiple myeloma and can be effectively treated with plasmaphoresis.

Because myeloma is usually a generalized disease at the time of diagnosis, systemic chemotherapy has been the major method of antineoplastic treatment. Long before anything was known about the kinetics of growth, it was found empirically that the cycle-independent alkylating agents seemed to have a role in the therapy of multiple myeloma. Both cyclophosphamide and melphalan were shown to be equally effective, but melphalan was used first and has been employed in most regimens. These regimens can be divided into two types: continuous and intermittent. With continuous therapy either a loading dose of melphalan or cyclophosphamide is given for eight to ten days followed by a lower daily dose, or therapy is simply started with a low daily dose of one of these agents. In both cases the dosage is then adjusted until the white count is around 3,000/mm³ and the platelet count is around 100,000 mm³. From the kinetic point of view, the alkylating agent is pushed to marrow toxicity in this manner in order to maintain the plateau of the tumor cell mass at the lowest possible level. With intermittent therapy large doses of melphalan or cyclophosphamide and prednisone are given daily for four days every four to six weeks. The results of this type of treatment are reported to be as good as or better than with continuous therapy. In addition, it does not require as frequent follow-up in terms of blood counts and adjustment of dosage as continuous therapy.

A role for cycle-dependent agents, once the tumor mass has been decreased with conventional therapy and a greater proportion of cells are in cycle, is theoretically attractive on a kinetic basis. Moreover, a protocol utilizing several alkylating agents plus vincristine, a cycle-dependent agent which blocks mitosis, has recently been reported to give an 85% objective remission rate.⁸

Before alkylating agents the median survival of patients with multiple myeloma was 7 to 11 months. Since these agents have been used, the median survival has been reported to have increased to about 30 months.⁹ However, there is

no controlled, prospective study comparing no therapy to alkylating agents, and the improved survival is based entirely on retrospective controls. Thus, the differences in survival observed may or may not be real and may be explained at least in part by earlier diagnosis and better supportive care (better control of infections for example).

The major toxicity of all the above regimens is bone marrow depression, which can be severe and prolonged. Another possible complication of chemotherapy is the development of acute myelomonocytic leukemia. During the past ten years approximately 70 cases of multiple myeloma terminating in acute myelomonocytic leukemia have been reported.¹⁰ Most of these cases had received alkylating agent therapy for several years; however, in a few cases no chemotherapy had been given. It would seem likely that chemotherapy played a role in inducing the leukemia in most of these patients. However, the possibility that acute leukemia is part of the natural history of multiple myeloma and is being expressed more frequently because patients are living longer cannot be rigorously excluded.

Radiotherapy is of great value in treating localized disease, and good results can usually be obtained. Specific examples include treating localized lesions that are producing bone pain and preventing the patient from ambulating, treating local lesions impinging on vital structures such as nerve roots and spinal cord, and treating large lytic lesions in long bones to prevent pathologic fractures.

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Thyroid Autoantibodies

DEAN G. TAYLOR, M.D.

Classically, four thyroid antigen-autoantibody systems have been described, two of which are currently of value in clinical diagnosis.

1. Thyroglobulin—a protein antigen, found in follicular colloid. Antibodies may be IgG, IgA, or IgM; are organ specific and noncomplement fixing.

2. Microsomal membrane lipoproteins—cytoplasmic antigens. Antibodies mainly IgG; fix complement.

3. Second colloid antigen—distinct from thyroglobulin. Antibodies not clinically significant, being found in many normal individuals and diverse disease states.

4. Cell membrane antigens—little known about this antigen-antibody system.

Perhaps potentially of greatest significance is the recently described system of IgG autoantibodies known as thyroid-stimulating immunoglobulins (TSI) having specificity for the epithelial cell hormone (TSH) receptor; "LATS" belongs in this category. These antibodies apparently displace TSH from its receptor and act to cause the glandular hyperactivity characteristic of Graves' disease. Their role in chronic lymphocytic thyroiditis, if any, is presently unclear.

Thyroglobulin antibody (TgAb) is normally found in approximately 3% to 5% of the general population, but is more common in women and may approach a 40% incidence in women over 40 years of age. Microsomal antibody (MsAb) is seen in up to 10% of "normals," more frequently in women, but shows a lesser female predominance in older individuals than does TgAb. Among relatives of individuals with either Graves' disease or Hashimoto's thyroiditis the incidence of thyroid antibodies approximates 30%.

What is the clinical significance of thyroid antibodies?

1. *Pathogenicity:* There is no good evidence that either TgAb or MsAb is pathogenic, although in-vitro cytotoxicity of MsAb for cultured thyroid

epithelial cells has been demonstrated. There is growing evidence that TSI may be directly responsible for Graves' thyrotoxicosis.

2. *Histologic findings:* The presence of TgAb and particularly MsAb correlates with histologically proven lymphocytic infiltration of the thyroid gland, and higher titers tend to be seen in patients with active and clinically evident thyroiditis.

3. *Diagnosis:* Absence of both TgAb and MsAb virtually excludes the diagnosis of Hashimoto's thyroiditis, in which high titers of both antibodies are typical. However, occasional patients with low titers are seen, particularly in the juvenile form. High-titered MsAb with low-titered or absent TgAb is a pattern occasionally encountered in the oxyphilic-hypercellular form of Hashimoto's thyroiditis. High-titered antibodies are also characteristically encountered in Graves' disease and primary myxedema (probably very often the end result of "burned out" or fibrous variant Hashimoto's thyroiditis). Low or moderate titers are seen in a variety of thyroid disorders in which some lymphocytic glandular infiltration occurs, including carcinoma. Thyroid antibodies may be transiently present in subacute thyroiditis, and, interestingly, in patients with thyrotoxic chronic lymphocytic thyroiditis ("Hashitoxicosis") with a low radioiodine uptake the titers tend to be low or absent.

4. *Prognosis:* Thyroid antibodies are of little prognostic importance in any given patient, but there is some evidence that the presence of MsAb and possibly TgAb in patients with Graves' disease indicates an increased risk of late post-thyroidectomy hypothyroidism. This seems to correlate histologically with the degree of plasmacytic infiltration and germinal center formation in the gland, rather than just the degree of lymphocytic infiltration itself. Similarly, "Hashitoxicosis" patients with high-titer antibodies and increased radioiodine uptake may have a greater risk of eventual hypothyroidism than those with low-

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CAT Scan of the Month

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A 35-year-old black man was transferred to Baptist Memorial Hospital from another hospital, three weeks previously having had skin grafted onto a chronic leg ulcer. He became febrile following the procedure and a diagnosis of cholecystitis was made. The gallbladder was removed but did not appear to be inflamed, and exploration of the abdomen was otherwise within normal limits. Postoperatively, he continued to spike a fever to 102-103 F daily.

Following transfer to our hospital, he suddenly developed pain in his right leg, and an embolus was removed from his femoral artery, successfully restoring the circulation. Blood cultures at that time were positive, so he was begun on an aggressive course of appropriate antibiotics. Nevertheless, he continued to spike a temperature daily. A CAT body scan was performed (Fig. 1). Please examine it and see if you can discover an abnormality.

Discussion

The kidneys are shown to advantage in Figure 1 and both are abnormal. The left one (remem-

ber you are viewing the scan from the feet of the patient) shows a round, fairly well-circumscribed radiolucent filling defect posteromedially that involves approximately half of the width of the kidney. Two smaller lucencies are visible within the right kidney, one posteromedially and one posterolaterally. The diagnosis of bilateral renal abscesses was made at this time. Percutaneous needle punctures produced thick, sticky tenacious pus from the left kidney, but none from the right. A percutaneous drainage catheter was to have been left in place at this time, but we believed that the pus was too thick to drain through a small catheter, and therefore removed the catheter. The pus was cultured.

Despite the vigorous antibiotic therapy, the patient failed to improve during the following ten days, so the kidneys were surgically explored for purposes of draining the abscesses. At operation,

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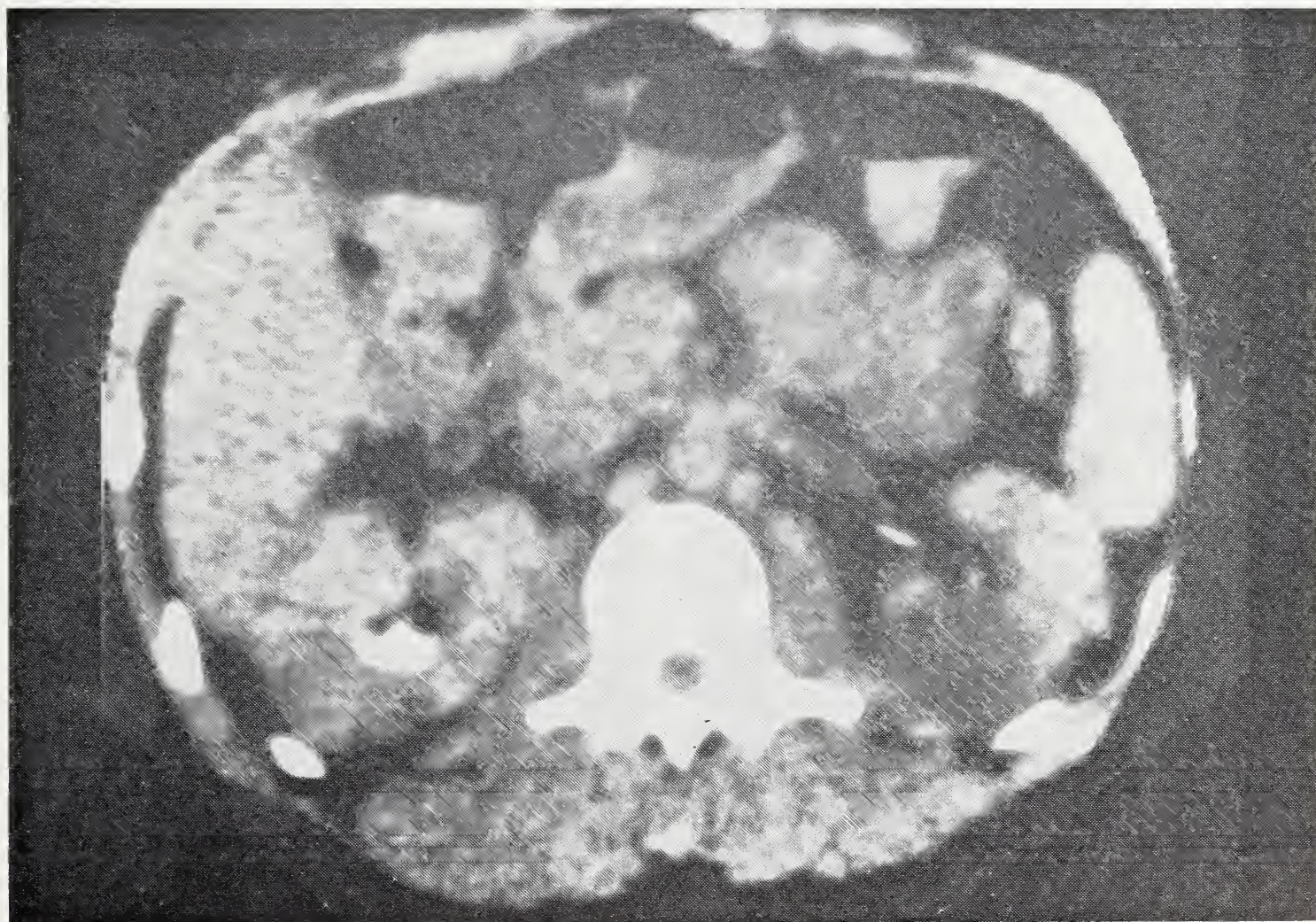


Figure 1

Ultrasound Study of the Heart in Primary Pulmonary Hypertension

ROBERT L. BELL, M.D.

This 54-year-old white woman entered the hospital with complaints of low back pain, chest pains, slight fever and shortness of breath. She had been on propranolol hydrochloride (Inderal) for paroxysmal auricular tachycardia and isosorbide dinitrate (Isordil) for chest pain. She complained of "smothering attacks at night," and had orthopnea and exertional dyspnea.

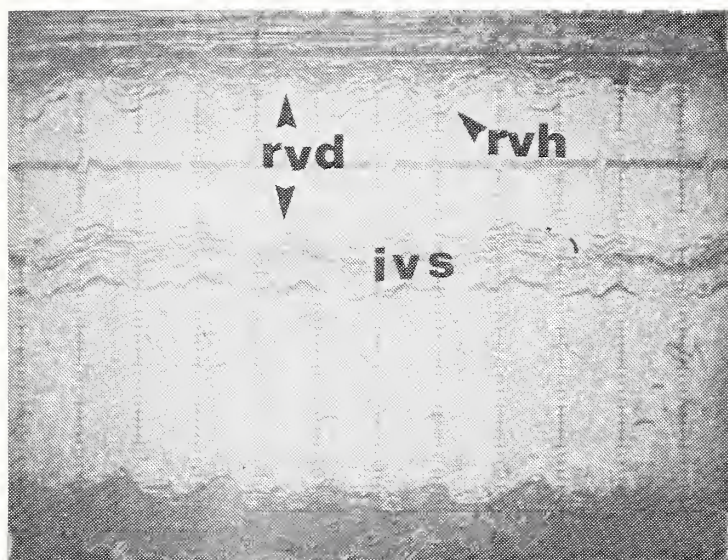


Figure 1. rvd=right ventricular diameter; rvh=right ventricular hypertrophy; ivs=interventricular septum

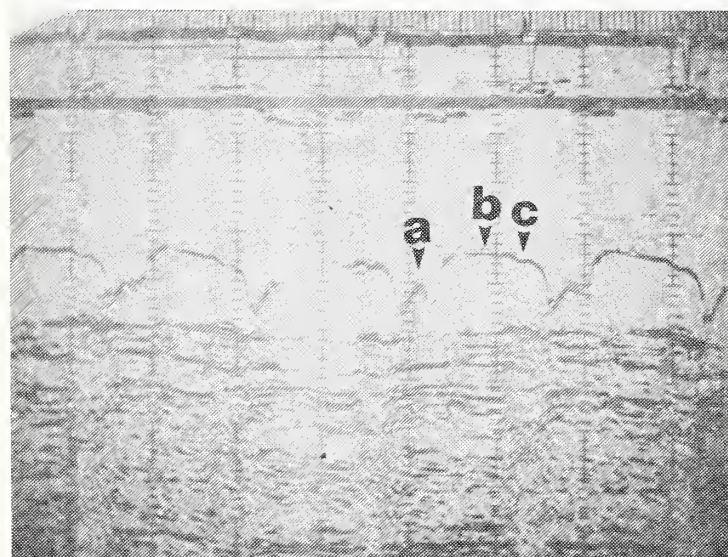


Figure 2. Pulmonic valve echo. a) mid systolic notch; b) flattened E to F slope; c) diminished A wave.

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At the age of 6 she had rheumatic fever, and as a young woman had pleurisy which required a pleural tap. She also had a past history of pericarditis.

Physical examination revealed a patient in no acute distress. Her blood pressure was 120/80, pulse 80, respiration 23, temperature 100 F. The remainder of the physical examination was essentially negative. An EKG showed right axis deviation and suggested right ventricular hypertrophy. Lung scan with macroaggregated albumin was normal, as was x-ray examination of the spine. Chest roentgenogram showed mild cardiomegaly, a prominent pulmonary artery, and pleural thickening at the left lung base. The WBC was 12,000 with 80% polys. PO₂ was 65, PCO₂ 45, PH 7.54.

An echocardiogram with pulsed doppler examination revealed the following: (1) Right ventricular dilatation, right ventricular hypertrophy, normal left ventricular diameter, borderline thickening of the interventricular septum (Fig. 1). (2) Pulmonic valve tracing showed flattened E to F slope, diminished A wave, and a mid systolic notch (Fig. 2). (3) The pulsed doppler

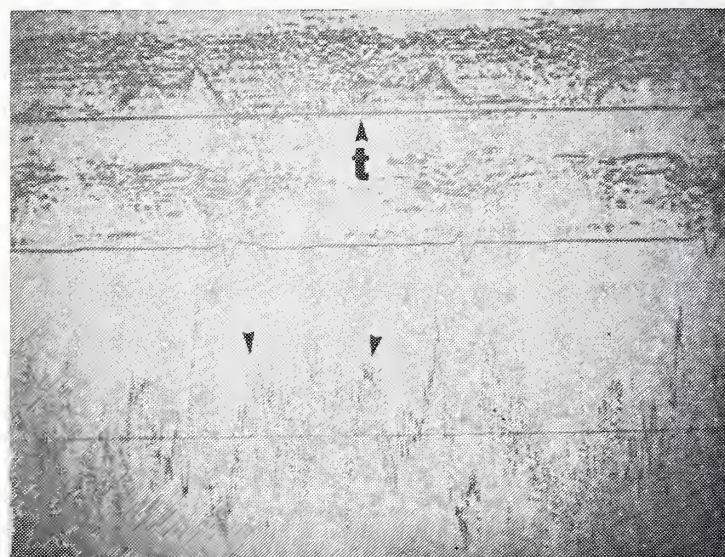


Figure 3. Pulsed doppler study across tricuspid valve. t=cursor line behind tricuspid valve; double arrows demonstrate coarse turbulence during systole.

tracing in the right atrium just behind the tricuspid valve (Fig. 3) demonstrated coarse turbulent flow during systole.

The echocardiogram showed normal mitral, aortic and tricuspid valve tracings and normal diameters of the left ventricle, left atrium, and aortic root. The pulsed doppler study showed no turbulent flow across the aortic valve, mitral valve, or pulmonic valve and no turbulent flow across the interventricular septum or the interatrial septum.

The echocardiographic demonstration of right ventricular hypertrophy, right ventricular dilatation, and turbulent flow in systole across the tricuspid valve, plus classical changes in the pulmonic valve echo, suggests the diagnosis of

primary pulmonary hypertension with tricuspid insufficiency. The lack of turbulence on the pulsed doppler study across the pulmonic valve, interventricular septum, and interatrial septum, together with normal findings on the pulsed doppler study and echocardiogram at other anatomic sites, lend further support to the diagnosis of primary pulmonary hypertension.

Because the patient had a past history of pleural effusion and pericarditis, and on this occasion showed pleural thickening and a low PO_2 , she has many findings that are commonly associated with primary pulmonary hypertension. Treatment in such cases is generally directed toward improving imbalances of ventilation and perfusion.

Laboratory Medicine . . .

(continued from page 362)

titer or absent antibodies and decreased uptake. Thyrotoxic patients with high-titered TSI tend to relapse following antithyroid drug therapy.

5. *Other disease associations:* Thyroid antibodies are frequently found in patients with atrophic gastritis-pernicious anemia, myasthenia gravis (another antireceptor antibody disease) and Sjogren's syndrome; they also are found significantly in patients with other autoimmune endocrine diseases such as insulin-dependent diabetes mellitus and primary adrenal atrophy. Recent studies have implicated asymptomatic autoimmune thyroiditis, as evidenced by the presence of thyroid autoantibodies, as a risk factor in coronary heart disease.

6. *Therapeutic correlations:* TgAb may persist after subtotal thyroidectomy for Hashimoto's thy-

roiditis, although both TgAb and MsAb have been found to decrease over time in both euthyroid and hypothyroid patients following thyroidectomy. When glandular atrophy is severe, titers tend to be low. Corticosteroid therapy may result in decreased titers. Titers first appearing after transient insult to the thyroid gland (e.g., surgical trauma) generally eventually disappear, and radioiodine therapy administered for severe angina pectoris may result in the temporary appearance of thyroid antibodies.

Because of the relatively frequent finding of discrepancies in both the presence or absence of TgAb and MsAb and their titers, it is recommended that both determinations be performed when evaluating the patient with possible autoimmune thyroid disease.

CAT Scan of the Month . . .

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an abscess was found on the left and drained. The right kidney contained large infarcts but no gross abscess.

The patient continued to regress in spite of efforts to reverse the course of his disease and died of renal shutdown. At necropsy, in addition to the renal abscess, a splenic abscess was present.

A large thrombus of undetermined origin was also found in the arch of the aorta. It had occluded the left subclavian artery. Cause of death was determined to have been septicemia and multiple septic emboli from the thrombus in the arch of the aorta.

EKG of the Month

W. BARTON CAMPBELL, M.D.

A 30-year-old diesel mechanic was referred to St. Thomas Hospital for evaluation. He had well-documented acute rheumatic fever at age 18. Subsequently he had few symptoms. He was told he had hypertension several years ago and was treated with antihypertensive medications until two months before the present admission, when he saw his physician. He was complaining of progressive dyspnea with exertion, orthopnea and paroxysmal nocturnal dyspnea. He was treated with diuretics and had improvement of his symptoms.

Examination disclosed a long medium-pitched grade III diastolic murmur at the base of the heart and left sternal border. There was also a systolic grade II apical blowing murmur which radiated to the axilla. At the apex a grade II diastolic rumble was audible which was ushered in by an S_3 . The first heart sound at the apex was of soft to moderate intensity, and no opening snap was audible. The arterial pulses were bounding and a prominent bisferiens pulse was palpable in the carotid arteries. There was a thrusting apical impulse palpable at the anterior axillary line. The electrocardiogram obtained at that time is shown in Figure 1.

The EKG discloses a normal sinus rhythm at a rate of 93 per minute. The PR interval is appreciably prolonged at 0.28 seconds. Occasional premature atrial contractions are noted. The QRS complex is moderately widened, with a duration of 0.11 seconds. The R wave in AVL has an amplitude of 1.8 mv. Note that leads V_1 through V_6 are half standardized, so that the S wave in V_1 is 4.0 mv in amplitude and the R wave in V_6 varies between 2.4 and 2.8 mv. The intrinsicoid deflection is prolonged at 0.06 seconds. The P wave shows slight terminal inversion in V_1 , and there are prominent ST-T changes with T inversion in leads I, AVL and V_4 through V_6 . The T wave is also modestly inverted in standard lead II.

Discussion

Electrocardiographic changes from left ventricular enlargement result primarily in increased QRS voltage and a delayed onset of the intrinsicoid deflection in the left precordial leads. Also of importance are ST-T changes and changes in the P wave (direction of left atrial depolarization). With increased pressures in the left heart the P

From the Department of Cardiology, St. Thomas Hospital, Box 380, Nashville, TN 37202.

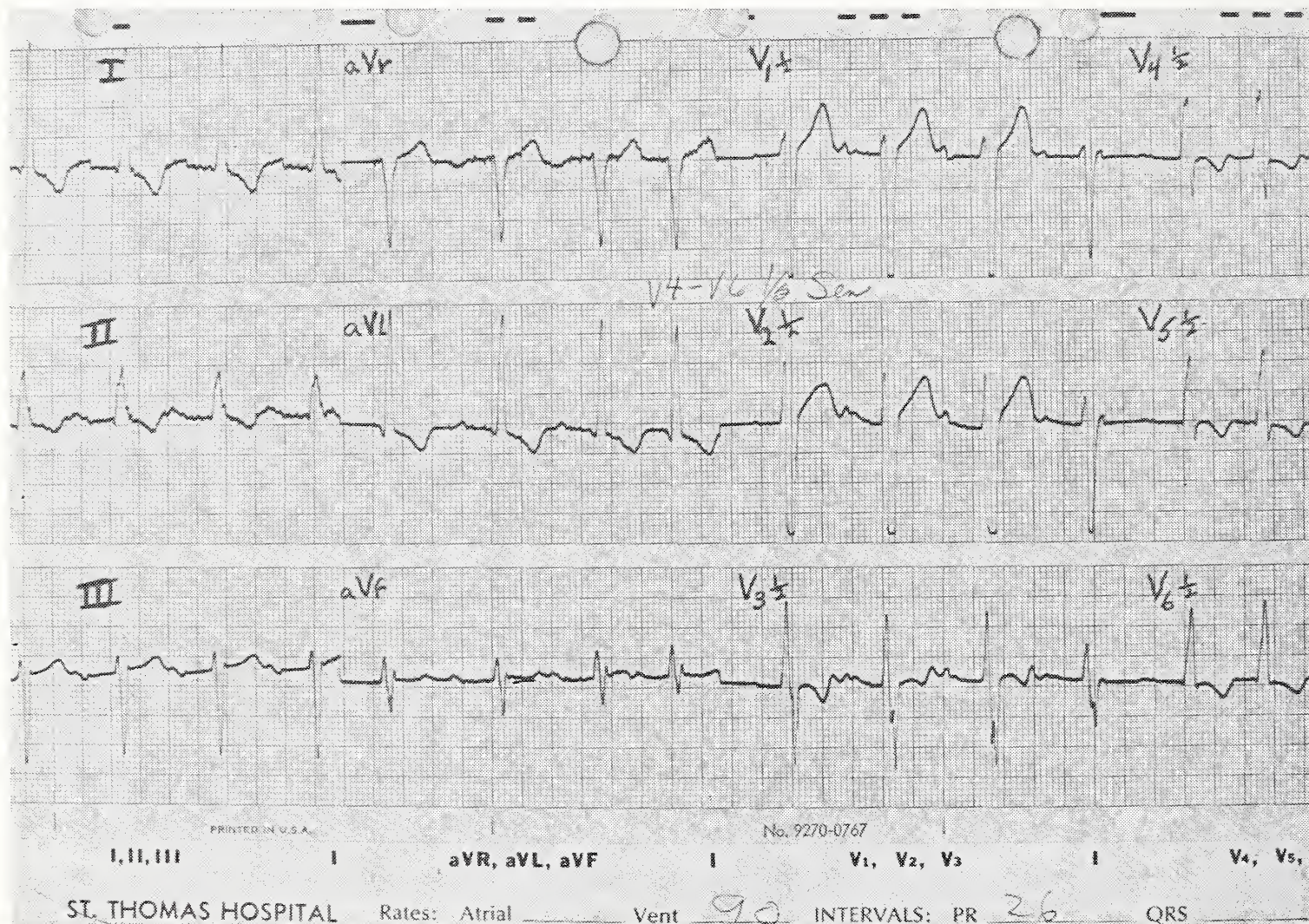


Figure 1

waves frequently become somewhat widened and terminally inverted in V₁ (representing an unusually posteriorly oriented P vector). Numerous criteria have been devised for the diagnosis of left ventricular enlargement. The EKG cannot distinguish between left ventricular dilatation and/or hypertrophy. Therefore, the nonspecific term, enlargement, is preferred.

The more sensitive the criteria employed in diagnosing left ventricular enlargement, the less specific these criteria are (a larger number of false positives will result). On the other hand, highly specific criteria lack sensitivity, as they include a large number of false negatives.

The point score system of Romhilt-Estes is most commonly used at our institution and appears to provide one of the best systems for balancing sensitivity and specificity.¹ The criteria of Romhilt-Estes are shown in Table 1.

Definite left ventricular hypertrophy is present if the point score is 5 or more, probable left ventricular hypertrophy if the point score is 4. It should be noted that these criteria are appli-

cable only to people who have QRS duration of less than 0.12 seconds. Although many patients with left bundle branch have evidence of left ventricular enlargement at necropsy, no criteria exist for reading left ventricular enlargement in the presence of left bundle branch block.

The concept of electrocardiographic changes from systolic and diastolic overload was described by Cabrera and Monroy.² Systolic overload (associated with increased left ventricular systolic pressures) was viewed as being associated with marked T inversion in the lateral precordial leads (such as that seen in Figure 1). The diastolic overload pattern (as would be found with aortic insufficiency or patent ductus) was felt to be associated with ST elevation, with tall peaked T waves and prominent Q waves in the left precordial leads. In our experience, although frequently talked about, this has not been a helpful concept. The systolic overload pattern (sometimes called "strain") will often occur in patients with predominantly volume (diastolic) overload lesions as seen in this patient.

The EKG described above obviously meets the Romhilt-Estes criteria for left ventricular enlargement. In addition, the presence of an R wave in AVL (in the absence of inferior infarction or anterior hemiblock) in excess of 11 mm has been found to have marked specificity for left ventricular enlargement.

This patient underwent cardiac catheterization and was found to have marked aortic insufficiency with a massively enlarged left ventricle. There was no gradient across the mitral valve or the aortic valve, and there was modest mitral regurgitation, for which he underwent aortic valve replacement.


Final Diagnosis: (1) Left ventricular enlargement with ST-T changes. (2) 1st degree AV block. (3) Premature atrial contractions. 

TABLE 1	
ROMHILT-ESTES POINT SCORE SYSTEM ¹	
	Points
1. Amplitude of the QRS complex positive if any one of the following is present: A. Largest R or S in limb leads greater than 20 mm. B. SV ₁ or SV ₂ greater than 30 mm. C. RV ₅ or RV ₆ greater than 30 mm.	3
2. ST-T segment positive if the left ventricular strain pattern with an ST-T vector opposite to the mean QRS vector is present: Without digitalis With digitalis	3 1
3. Left atrial enlargement positive if terminal P force in lead V ₁ is abnormal.	3
4. Abnormal left axis deviation positive if the left axis of the QRS complex is leftward and superior at 330°.	2
5. QRS duration greater or equal to 0.09 seconds (QRS duration must be less than 0.12 seconds in order to exclude bundle branch block.)	1
6. Intrinsicoid deflection positive if the intrinsicoid deflection in lead V ₅ or V ₆ is greater or equal to 0.05 seconds.	1

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Compliance in Hypertension

JOHN W. HOLLIFIELD, M.D.

The successful management of the patient with blood pressure elevation requires five steps: the initial recognition of elevated pressure, the confirmation that an elevated pressure does in fact indicate sustained hypertension, evaluation of the patient, development of a therapeutic program which will lower pressure, and finally, life-long compliance with whatever therapeutic program is needed to normalize blood pressure and therefore decrease the cardiovascular morbidity and mortality caused by blood pressure elevation.

Hypertension emerged as an important medical problem during the 1950s, 1960s and 1970s, and initially we saw an emphasis on research which improved our understanding of the pathogenesis of hypertension, improved our ability to recognize curable disease and increased the number of treatment modalities available. The National Health Survey (1959-1962) found hypertension existed in 23 million Americans and recognized that many patients who knew of their blood pressure elevation were under inadequate control. Thus the compliance problem was brought to the attention of the medical profession.

Noncompliance with an assigned therapy is not a new problem to medicine nor is it unique to hypertensive care. Blood pressure elevation is a common chronic disease process whose outcome can be modified by adherence to a therapeutic plan, hence it is one of the most accessible diseases in which to study the factors affecting compliance.

The usual therapeutic program for hypertension requires modification of lifestyle (dietary sodium and perhaps caloric restriction, reduction of life's stresses, and self-medication). There is usually

no tangible immediate benefit and often patients feel worse on antihypertensive medications than they did before beginning treatment, both of which discourage patient compliance. To be effective, the physician must develop an approach to hypertension which stimulates interest in the disease and reduces the impact of lifestyle modification.

Perhaps the most important facet of such an approach is the development of a consistent supportive relationship between physician and patient, in which the physician demonstrates a personal interest in the patient and his disease and encourages a similar interest from the patient. Often the development of such interest requires intense patient education, and the involvement of paramedical health professionals (nurses, dieticians, etc.) and the patient's family. This is particularly important in making medical decisions which affect lifestyle, medications, etc.

Finally, the establishment of a program which results in regular convenient medical care is known to encourage compliance, as it reduces the time spent waiting to see the doctor. Patients should be sent reminders of their appointments and reappointments if a clinic visit is missed. As medications form the backbone of an antihypertensive program it is also most important to develop a medication plan which minimizes cost, reduces medication side effects, and simplifies drug administration. There is no doubt that the more costly, noxious, and complex a medication program is the less the compliance with it. Perhaps by developing a management approach to hypertensive patients which includes good rapport, patient and family involvement, and simplified medical care, a larger portion of our hypertensive patients will obtain effective blood pressure control.

From the Specialized Center on Research in Hypertension, Vanderbilt University Hospital, Nashville, TN 37232.

Silver Anniversary Reflections

HAROLD W. JORDAN, M.D.

March of 1978 marked the 25th year since the Tennessee Department of Mental Health and Mental Retardation (TDMHMR) was separated from the old Department of Institutions.

When the Department was first established there were only four institutions in this state providing care to the mentally ill and mentally retarded. These facilities—Western, Central, and Eastern State Hospitals for the mentally ill and Clover Bottom Home for the Feeble Minded at Donelson—functioned primarily as custodial institutions.

Many changes have been made since those early days. New facilities—Moccasin Bend at Chattanooga and Tennessee Psychiatric Hospital and Institute (now Memphis Mental Health Institute) were constructed and staffed to provide care to mental patients near their homes.

The Department also recognized a need for additional facilities to serve the mentally retarded, and in 1960, Greene Valley Hospital and School opened at Greeneville in East Tennessee. In 1969, construction was completed on Arlington Hospital and School near Memphis.

Our views concerning the role of these eight state institutions have changed dramatically over the past 25 years. We no longer call our large state facilities for the mentally ill “hospitals.” They are “mental health institutes” offering a full range of services.

By the same token, our “homes for the feeble minded” and “hospitals and schools” have become “developmental centers” in recognition of the fact that the mentally retarded person requires more than mere custodial care.

These new concepts have been brought about by many factors. The development of new drugs, new treatment and training techniques, and an awakening of public concern for the plight of the mentally handicapped have brought about a new way of viewing the total service delivery system.

From the Tennessee Department of Mental Health and Mental Retardation, Nashville, TN 37219.

Dr. Jordan is the commissioner of the Tennessee Department of Mental Health and Mental Retardation.

The most important change involves community programming. Today, Tennessee has 30 major community mental health centers strategically located across the state. Of these 30 centers, 19 have already gained comprehensive status. We expect the remaining 11 to become comprehensive within the next five years.

These 30 major centers also operate a network of satellite programs which means that direct mental health care is available within the boundaries of 82 of Tennessee's 95 counties. They provide comprehensive or nearly comprehensive services, not only to the vast populations of adult mentally ill but also to children and youth, alcoholics and drug addicts, the geriatric clientele and the forensic clientele as well. Comprehensive means the provision of all services that are prescribed by the Community Mental Health Center Act of 1963 and Public Law 94-63 of 1974, which is currently being amended by Congress.

Many new programs have been developed in the community to provide the mentally retarded with an opportunity to grow to their maximum potential.

These services include diagnostic and evaluation services, special sheltered workshop and extended employment programs for adults, adult activity centers, preschool programs for young children, and community residential facilities.

The TDMHMR currently funds 46 treatment/rehabilitation programs for alcohol and drug abusers, and special programs have been implemented which allow pretrial defendants to be screened for competency to stand trial in the jurisdiction of the court rather than being sent to the forensic services unit at Middle Tennessee Mental Health Institute.

Certainly, the above is not a total list of the community support programs which have been developed, improved, or continued during the past 25 years. It is representative.

There are only five community mental retardation programs in the entire Southeast presently accredited by the Joint Commission on Accreditation of Hospitals. Of these five, four are in

Tennessee at Jackson, Trenton, Bolivar, and McKenzie.

The development of these and additional quality community services signifies that individuals are receiving more and better care while in the community. It also means that these are alternatives for people currently in Tennessee's mental health institutes and developmental centers.

In 1952, the only avenue of treatment open to the mentally handicapped was, for the most part, a large institution. True, there were a few private psychiatrists but not enough. Today, the network of community programs which spans the state provides the individual in the community with an opportunity to be evaluated and diagnosed. Depending on his condition, he may then receive the necessary care to restore him as near as possible to normalcy. The development of community resources has been a number one priority for the TDMHMR.

It is also a priority for future years. A system has been developed and implemented to allow money to be reduced from the mental health institute and transferred to community mental health programs as the amount of institutional services required to appropriately care for the

mentally ill declines and as community alternatives and support programs are expanded.

The Department is presently developing licensure standards for community mental health/mental retardation programs, and we expect to begin licensing them in January of 1979.

Community mental health center programs have been evaluated by the Department for several years. We plan to utilize some of the same standards developed for CMH centers to evaluate other programs not now covered by this evaluation. Community support can and does mean better care in the community. It can and does mean better care in departmental facilities. Most of all, it insures better care for the mentally ill and mentally retarded in Tennessee wherever services are provided.

Our goal is to provide needed services which are appropriate, accessible, efficient, and acceptable—not something that is offered because we offered it in the past.

This listing of changes and accomplishments only tips the iceberg. In the past 25 years, the TDMHMR has undergone many changes. Through it all, our goal has been to provide the best and most appropriate care to those who have a need for it.

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The Doctors' Obligation to the Handicapped

JOSEPH G. BURD, M.D.

"Doctor, Jane started biting me, just like a mad dog. It started just this year!" The story was quite a shock to me. Jane Doe is a 14-year-old cerebral palsy patient, darling little girl. I had put both feet and both hips through extensive surgery.

After 12 years of hard work on the adoptive aunt's part plus whatever it takes to help give a child freedom from the walker, crutches, and then canes, the child was "normalized." This handicapped child was thrown into the competitive, discipline-troubled education maze of our "normal" school system.

One of my own five children, handicapped mentally and physically, died at the age of 21, happy during his lifetime. He lived quite contentedly and was much loved in his death.

The invidious comparison struck hard.

Money flows in for crippled children from government and the private voluntary agencies. I wonder if the donation divorces the fit from the sick. I wonder if the dollar replaces love. Do the theorists in child care seek statistics rather than the happy child?

The trials of "one on one" in teaching the handicapped provide jobs for the teachers but the group of the disabled learn more from each other. The doctor or social worker is of less help to the alcoholic than the group. Alcoholics Anonymous rescues the alcoholic. The handicapped child learns without unfair competition from the handicapped.

No amount of money, teaching, or training will

make the handicapped child a normal child. Understanding and love can produce a child, then an adult who has both dignity and a concept of his limitations.

Children who are healthy little animals will hurt the emotions and, at times, do bodily harm to the less able. The handicapped child can come into his potential less painfully if he is competing with other handicapped children. All children compete at one level or another. Motivation and competition are related; both are learning processes.

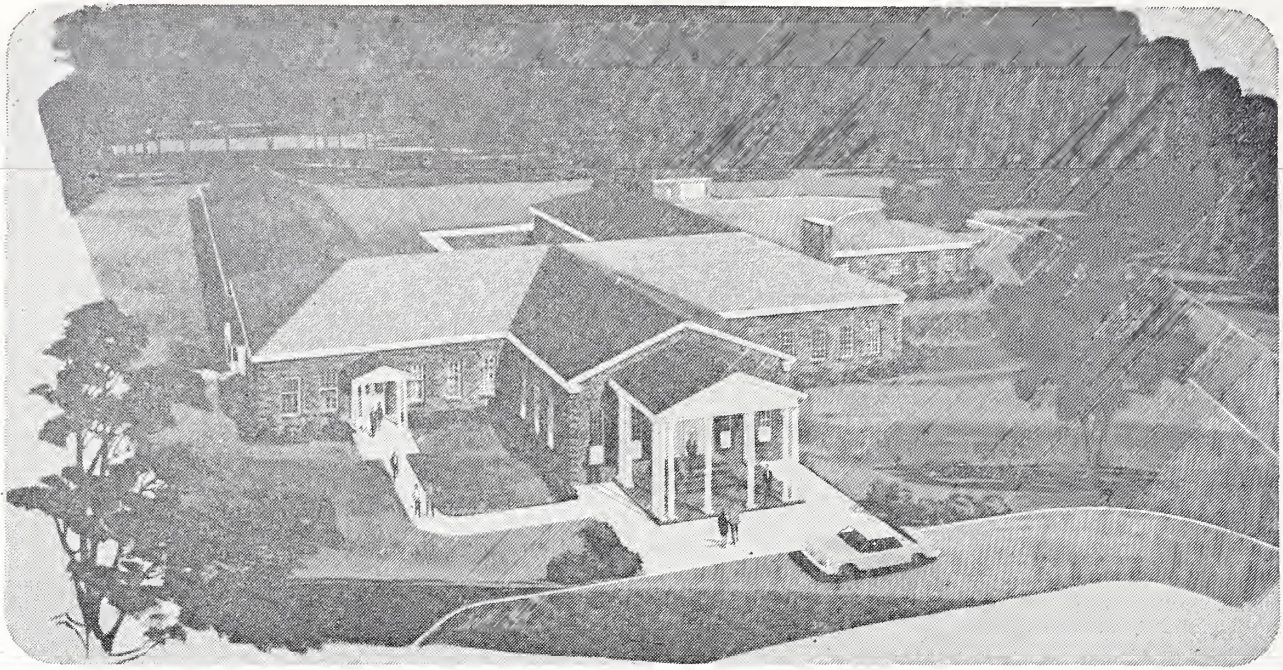
The parents of these children come to us as doctors sometimes for guidance, sometimes just to talk. We need to dispel the notion of guilt in the parents. We need to discuss the positive but intangible good effects of the handicapped child on the family. We need to help the parents try to treat the handicapped child as a child, with rewards when earned and by withholding rewards when they are not earned. All this is in relation to the child's potential.

It is so easy to be ineffective as doctors, and by default, let the mentally or physically impaired child be the ward of social workers or government agencies. It is rewarding, however, to guide the parents to the goal of developing a child with dignity, with awareness of his handicap, and with love of fellow man.



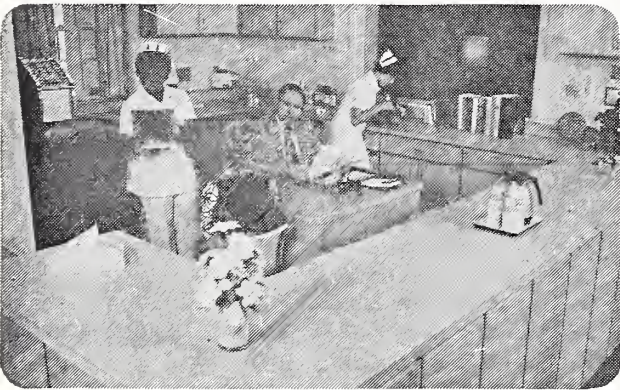
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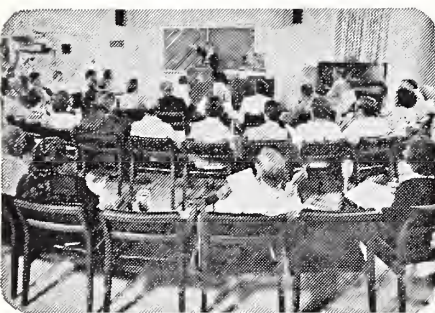
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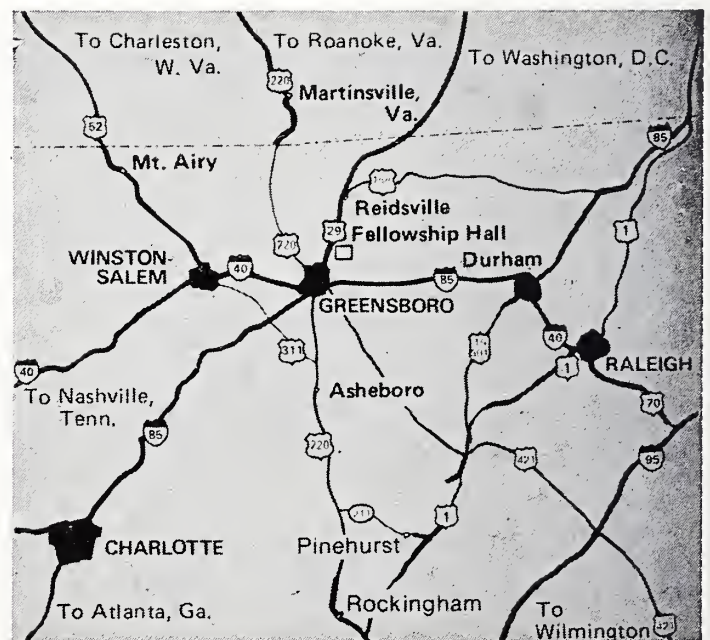
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Physician Comment Sought on Changes in Ethics Code

The American Medical Association is seeking comment regarding proposed revision of the AMA's Principles of Medical Ethics.

The amendments proposed by the AMA Judicial Council are intended to modernize the language of the Principles and to clarify their meaning. The changes are on the agenda of the AMA House of Delegates for the Annual Convention in June, 1978, in St. Louis.

Comments and suggestions should be addressed to Bruce Nortell, Secretary, AMA Judicial Council, American Medical Association, 535 N. Dearborn St., Chicago, IL 60610.

Following are the present Principles of Medical Ethics, and the proposed new version of the Principles.

Present Principles of Medical Ethics

Preamble. These principles are intended to aid physicians individually and collectively in maintaining a high level of ethical conduct. They are not laws but standards by which a physician may determine the propriety of his conduct in his relationship with patients, with colleagues, with members of allied professions, and with the public.

Section 1. The principal objective of the medical profession is to render service to humanity with full respect for the dignity of man.

Physicians should merit the confidence of patients entrusted to their care, rendering to each a full measure of service and devotion.

Section 2. Physicians should strive continually to improve medical knowledge and skill, and should make available to their patients and colleagues the benefits of their professional attainments.

Section 3. A physician should practice a method of healing founded on a scientific basis; and should not voluntarily associate professionally with anyone who violates this principle.

Section 4. The medical profession should safeguard the public and itself against physicians deficient in moral character or professional competence. Physicians should observe all laws, uphold the dignity and honor of the profession and accept its self-imposed disciplines. They should expose, without hesitation, illegal or unethical conduct of fellow members of the profession.

Section 5. A physician may choose whom he will serve. In an emergency, however, he should render service to the best of his ability. Having undertaken the care of a patient, he may not neglect him; and unless he has been discharged he may discontinue his services only after giving adequate notice. He should not solicit patients.

Section 6. A physician should not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgment and skill or tend to cause a deterioration of the quality of medical care.

Section 7. In the practice of medicine a physician should limit the source of his professional income to medical services actually rendered by him, or under his supervision, to his patients. His fee should be commensurate with the services rendered and the patient's ability to pay. He should neither pay nor receive a commission for referral of patients. Drugs, remedies or appliances may be dispensed or supplied by the physician provided it is in the best interest of the patient.

Section 8. A physician should seek consultation upon request; in doubtful or difficult cases; or whenever it appears that the quality of medical service may be enhanced thereby.

Section 9. A physician may not reveal the confidences entrusted to him in the course of medical attendance, or the deficiencies he may observe in the character of patients, unless he is required to do so by law or unless it becomes necessary in order to protect the welfare of the individual or of the community.

Section 10. The honored ideals of the medical profession imply that the responsibilities of the physician extend not only to the individual, but also to society where these responsibilities deserve his interest and participation in activities which have the purpose of improving both the health and the well-being of the individual and the community.

Proposed New Principles of Medical Ethics

Preamble. These principles are intended to aid physicians in maintaining high standards of ethical professional conduct in their relations with patients, colleagues, members of allied professions, and the public.

One. The primary objective of the medical profession is to serve patients competently with full respect for their dignity.

Two. Physicians should strive continually to improve medical knowledge and skill and to make available to patients and colleagues the benefits of their professional attainments.

Three. A physician should not engage or participate in treatment which is not founded on a scientific basis.

Four. The medical profession should protect the public and itself against physicians deficient in moral character or professional competence. Physicians should observe all laws, uphold the dignity and honor of their profession, and voluntarily accept its self-imposed disciplines. Physicians should expose, without hesitation, illegal or unethical conduct of members of the profession.

Five. Physicians may choose when they will serve except in emergencies. Competent services should be provided and continued until the physician is discharged or services are discontinued after giving adequate notice. A physician should not attempt to obtain patients by deception.

Six. Physicians should resist restraints which interfere with medical judgment and skill or cause deterioration of the quality of medical care.

Seven. Physicians are entitled to be compensated fairly for personally providing or supervising the medical care of patients. A commission should not be paid nor accepted for the referral of patients.

Eight. A physician should seek consultation upon request or whenever it may benefit the patient.

Nine. A physician may not reveal confidences entrusted during medical attendance or deficiencies observed in the character of patients, unless required to do so by law or it becomes necessary in protecting the welfare of the patients or the community.

Ten. In addition to providing care to patients, the physician has a social responsibility to participate in activities intended to improve the health of the community.

That Cost Commission Report: An Answer Before It's Too Late

The AMA-created National Commission on the Cost of Medical Care—in submitting its report with 48 recommendations—has given America a bold and far-ranging statement of *what* has to be done about that cost. And among physicians, there are bound to be *whys*.

** Why was the commission created?*

Because the AMA recognized the damage and danger inherent in the relentless surge in health-care costs—an average of 11% a year. And because the AMA, as the nation's largest physician organization, was the logical choice to take the lead in curbing that surge and in reducing costs where possible.

** Why was the commission composed of representatives from a variety of fields—including industry, insurance, labor, government, and academia—instead of being limited to physicians and health-care institutions?*

Because on an issue affecting as many fields and as many people as health-care costs, a panel lacking breadth of membership would also lack credibility. Conclusions reached by persons of like opinion generally excite little attention outside their own group, in contrast with the widely favorable notice the commission report has received in the media and elsewhere. Even so, 11 of the 27 commission members are physicians, and one is a dentist. Thus, the doctors' interests were amply and realistically represented.

** Why are some of the 48 recommendations at variance with medicine's established way of doing things and even with AMA policy?*

Because *every* group involved directly or indirectly with health care must put cost containment ahead of certain other considerations. To cite examples from the recommendations, experi-

mental payment to hospitals on the basis of prospectively determined rates could be a financial disadvantage to hospitals. Marketplace choice of health-care plans on the part of employees could be a bookkeeping burden for employers.

Pull Together to Win

Responsibility on the part of each segment of health care is integral to working together—and the various segments must act together to act effectively and fairly. They must pull together to head off really tough regulation.

The major thrust of the report is that it calls for mostly voluntary action and has things like this to say about regulation:

"The costs of regulations of all kinds, both governmental and voluntary, have significant impact on the total costs of health care. Government, as well as providers of care, must give attention to the simplification of the regulatory process and to consolidating and reducing the number of inspections, audits, surveys, reports, and other mechanisms of enforcement."

The private-sector initiative sparked by the AMA is the way to be our own enforcer in doing what the public wants. Polls show that while most people are satisfied with their medical services, they are uptight about costs—and recognize the impact of physicians on hospital costs, which they resent most.

The AMA House of Delegates will be weighing the commission report at the June annual convention. Naturally the report raises some questions. But it answers the great basic question—*Who is to hold down costs?* It may well be the last bona-fide set of answers the health-care world can offer on its own.

Prepared by the
Public Affairs Division, AMA

Let's Not Be Beastly to the South

MALCOLM HULKE

The following article appeared in the Hampstead & Highgate Express, London, last fall. Mr. Hulke is a 53-year-old, free-lance writer and television specialist who spent six months last year touring the United States in search of material for a new novel. Part of his time was spent in Hurtsboro, Ala., at the Creekwood Writers' Colony which is under the auspices of Birmingham Southern College. He was impressed by the Family Practice Center there and, indeed, by the American South.

When Jimmy Carter appeared on America's *What's My Line* three years ago no one guessed his occupation—Governor of Georgia.

Yet ask any bright British teenager who is George C. Wallace and they're likely to say he's the Governor of Alabama in the USA. They may also add that he's stupid, and what do you expect of an awful place like Ala-wherever, and did you notice how David Dimbleby kept a straight face during that television interview?

Why do we all know Wallace? Possibly staying power. He did two four-year terms: constitutionally forbidden a third consecutive, his wife ran and won; now he's completing two more four-year terms—20 years more in than out, longer than Harold ruled Britain.

But another, possibly basic, reason is our morbid fascination with the South which Wallace seems to typify to British minds—the chain gang from which Paul Muni escaped in 1932, mad Polacks seducing demented sisters-in-law, club-swinging sheriffs and murdered civil rights leaders. It's non-stop drama, or so we hope, prejudiced and brutal, the place we love to hate.

Crossing the Georgia state line I was alert for bullying speed cops my Massachusetts friends had warned me about; redneck vigilantes wait in packs, they said, to spring at any car with Yankee number plates, extracting heavy cash fines which they share among themselves.

My eyes were peeled for roadside chain gangs.

Reproduced with permission of the Muscogee (Ga.) County Medical Society from the *Bulletin of the Muscogee County Medical Society* (pp. 11-13, Jan. 1978).

I looked in every tree for a hanged Negro, on every hilltop for a fiery cross. So much for brain-washing.

At the state tourist office I was greeted by a lady information officer, very black. After that, Atlanta—modern, super city. The first time I got lost, positively friendly state troopers put me back on route. The second time, nearing the dreaded, hateful Alabama, a cafe owner let me use his private toilet, his phone, ballpoint pen and map, and finally shook my hand with the words "Welcome to the South."

It's like England upside down. Our Southerners, predominately Londoners, blithely believe they are the norm of Englishness home and beauty. Regionalism starts north of Luton. New Englanders unthinkingly presume they are the real Americans; Southerners know they are different and rather relish it.

To think of the South only in terms of racism is as unfair as those Americans who on hearing a British accent immediately say: "When are you going to stop pushing around the Irish?" Desegregation is not the only thing going on in Dixie-land.

Recently medicine returned to Hurtsboro, Alabama. Since the last GP left, the neat little medical centre building has stood empty. Its reopening is not a world shattering event, though for 1,500 Alabamians, black and white, it's mightily important.

A big centre in neighbouring Georgia will supply young doctors who want training to become family practice physicians, and—a giant step, unthinkable seven years ago—Hurtsboro's centre now has only one entrance and one set of lavatories.

Most of the town turned out for the dedication. A Negro minister, the Rev. Benjamin Thomas, led prayers and a white state senator, C. C. "Bo" Torbert, a possible future governor of the state, reminded us of the Old South with this sad description of a funeral back in 1889:

"The deceased was a poor fellow like most Southerners. They buried him in the midst of a marble quarry, had to cut through solid marble

to make his grave, yet a little tombstone they put above him was brought in from Vermont. The marble quarry was in the heart of a pine forest, yet the pine coffin was imported from Cincinnati. He was buried within reaching distance of an iron deposit, yet the nails in his coffin were brought down from Pittsburgh.

"The South didn't furnish a thing for that funeral but the corpse and the hole in the ground."

The senator then raised our spirits. Since 1961 Southern personal income increased 110% against the 77% US average. The South has one third of America's good farmland, two thirds of land with 40 or more inches rainfall, 52% of the nation's coal, 65% oil, 76% natural gas. "The third century of America belongs to the South. Visions of the possible hope for the future is what it's all about in the South today."

No mention of race or bussing, the only things we ever hear about. A deliberate oversight? Or that while our Southern image lingers on lynchings, the modern Southern mind is focused on small town medical centres, improved education, steel output in Birmingham, the Southern Growth Policies Board and the projected Tennessee-Tombigbee Waterway, none of which I'd ever heard of?

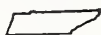
The Civil War knocked out the economic underpin of the South—slavery. We may criticise the South for taking a long time to readjust, but just how long is it taking us to earn our own living since the liberation of India and our African colonies?

"Racism will go with better education," a black male nurse told me at the dedication service. "We're ignorant and they're ignorant, but with better education things will change."

Alabama already has ten predominately black colleges and universities. Social apartheid, particularly in rural areas, remains total among older people. "But some young whites sneak out and play basketball with us," said a 17-year-old high school student. "Folks playing basketball can't hate each other."

Don't let's be beastly to the South. The chain gangs vanished 20 years ago. Bus burnings are a memory. It is America just as much as Maine or New York. And in November it's a darned sight warmer.

Governor Wallace may not be every intellectual's ideal. But in a country where profit is not a dirty word the South has a visibly burgeoning economy. Regrettably it's rather more than we can say of ourselves.



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Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

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The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

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Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

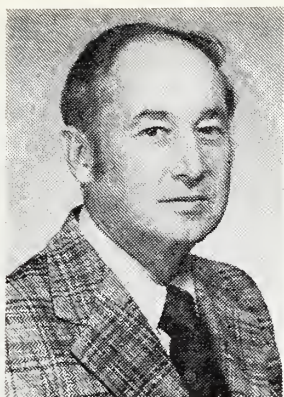
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President's page

Beginnings . . .

In this, my initial TMA literary(?) effort, I'm going to try to outline some of my personal objectives for this page. I'm also going to attempt to indicate to you some of what I consider to be reasonable Association goals.

I would like for this portion of our Journal to be a two-way forum. I believe that, on any particular issue, I will be voicing the opinion of the majority of our members. In the past, both the majority and minority have been relatively silent. I think that, if what is printed here evokes no comment or criticism, the material is dull and disinteresting. In that eventuality, I would need to discuss other ideas; ideas that the membership *does* consider pertinent and provocative. Please let me know what's good, and what's bad, about my efforts.

It is also important that the membership understand that my position is that of spokesman, not policy-maker, for the profession in Tennessee. The philosophy and directives of the Association are established by the House of Delegates in April. Between the annual meetings, the current issues are addressed by the quarterly Board of Trustees meetings. Finally, between the Board meetings, the Executive Committee of the Board meets to handle the business of the Association.

Consequently, the TMA, through its President and its committee structure, is an active service entity. Its highly capable staff is literally in touch with the leadership on a daily basis. Thus, there is no reason for there ever to be a "lack of communication" as a basis for criticism. Communication, however, requires a sender and a receiver. It is incumbent on the member to be half of this team.

I'm convinced that the 10% to 15% of our membership who attend the organization's meetings is the maximum achievable. To me, it's foolish to think in terms of 40% to 50% active participation. The 85% to 90% have chosen to spend their professional time differently. They should not be criticized (and I won't ever chastise them) for this decision.

It is my goal to convince that 85% to 90% that this Association belongs to them as surely as it does to the 10% to 15%. They will be reassured, as best I can, that they have the same freedom to criticize me, or the Association, as any other member.

Association goals will involve two broad, and many narrow, areas of activity. The broad goals are really extensions of our reason for existence. They involve ethics and access.

Ethical considerations include the establishment of a disabled physicians program. More than 30 states already have disabled physicians programs. The AMA has been, and will be, of great assistance. This program will be aimed at rehabilitation and must not be primarily punitive. Later, as an intangible of this program, I hope we can deal with the incompetent and the fraudulent MDs. These programs will be benefited by the availability of a limited license; we'll attempt, through the legislative process, to permit the Board of Medical Examiners to have the power of limiting a license.

Most of us can agree that access to quality health care for all is a worthwhile and achievable goal. Again, hope springs eternal. It is my intention to attempt, with your help, to modify the medical and political approaches to this goal.

In the next few months, I'll elaborate on these goals and subjects related to them. Write or call me about your views so that I can adequately project them to the public. Also, in your criticisms, bear in mind that this page must be written six weeks before it reaches you in printed form.

Sincerely,

John B. Dorrain, M.D.
PRESIDENT

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MAY, 1978

editorials

De Motu Cordis

Resistance to change is one of the hallmarks of the human condition. There is a strong desire not to rock the boat, on the theory that the devil you know is preferable to the god you don't know. The late 16th and early 17th century marked a time of great change, and the change got a lot of people in trouble. Galileo was forced by the Inquisition on pain of death to repudiate his

heliocentric theory of the universe. He was banished and his works were placed on the Index, where they remained for two centuries. William Harvey's *De Motu Cordis* was banned by the Inquisition and its author suffered personal attack and loss of a part of his practice.

This year marks the 400th anniversary of the birth of William Harvey and the 350th anniversary of the publication of his work, which successfully challenged the 1400-year-old dogma on the heart and blood proposed by the great Roman physician Galen. To contradict Galen was both medical and theological heresy, and one French physician, called "the prince of anatomists," declared that if Harvey's dissections were at variance with Galen's anatomical facts, it meant not that Galen was wrong, but that nature's organism had changed in the intervening 14 centuries.

The other day I received an announcement of a five-day celebration to be sponsored in July by the Royal College of Physicians, to include symposia on medical history and cardiovascular medicine, with papers to be presented by leading authorities from over the world. Other celebrations will be held in the fall to mark this memorable occasion. It is a banner year for medicine and physiology, commemorating what Sir William Osler called "the first time a great physiological problem was approached from the experimental side by a man with a modern scientific mind who could weigh evidence and not go beyond it."

As he conducted his experiments on the rapidly beating mammalian heart, Harvey wrote, "I kept finding the matter so truly hard and beset with difficulties that I all but thought with Fracastoro, that the heart's movement was only to be comprehended by God." At the end of his book he confessed that any attempt to pursue the medical implications of his discovery would fill a volume so huge that "even my lifetime would be too short to make an end of it."

Three and a half centuries later the end is still not in sight.

J.B.T.

Nos Morituri Salutamus . . . Whom?

Anyone able to retain some measure of objectivity in the face of all the human misery and carnage displayed in the recent TV series *Holocaust* should have received a message for our times both loud and clear. The message is that the Jews fell victim to Nazi perfidy and inhumanity largely because they were unwilling to believe

their countrymen, or anyone else, for that matter, capable of such monstrous behavior even though they watched it being carried out before their eyes. They were willing to go to "resettlement villages" without resistance because they could not believe the alternative. They could not believe it even though Hitler very clearly stated his aims. He was, they said, only a politician. The Jews on the one hand and, except for a few perceptive, courageous individuals, the Christian Church worldwide on the other simply closed their eyes to reality.

Some 50 years later the scenario is being replayed. Only the characters have changed. Appeasement is again the order of the day. International communism is the "heavy." The "free world," specifically the United States, is the dupe. The B-1 bomber is shelved, the neutron bomb may be by the time you read this, and our navy is being scrapped, simply because our leaders are unwilling to believe that the Soviet Union and its minions are capable of the inhumanities they daily commit before our eyes, and that they wish to extend them worldwide. They cannot believe it even though Lenin, Stalin, Khrushchev, and others very clearly stated their aims: to bury us. They were, we say, only politicians. And they are not in office.

And so history repeats itself because man is unwilling to believe his neighbor's inhumanity. We are unwilling because we are afraid. Remembering the flaws in our own history, we are not so much afraid of being sacrificial lambs as that we might ourselves prove to be inhuman. While mouthing platitudes about human rights, we do not speak out against the use of torture by communist countries for fear it will hamper our arms limitation talks. What is perhaps even worse, our government actively supports regimes whose police forces contain some of the most vicious criminals on earth, including some former SS leaders, who use against their people the same tactics used against the Jews by Hitler. With friends like that, who needs enemies? Mankind's common heritage is that underneath the veneer of civilization, in each one of us lurks a Christ-killer and a murderer.

The Nazis determined that all Jews must die. The Christian world, and the Jews themselves, watched in disbelief. But they watched, and did nothing.

The Soviet Union has determined that the free world must perish; in spite of its obvious faults the United States is the only hope of the world's

downtrodden. But we watched as the free people in Hungary and Czechoslovakia died. The world, and we ourselves, now watch again in disbelief. But again we simply watch.

This is to state the problem. There is an answer, which will be dealt with subsequently. Otherwise—

Nos morituri te salutamus. But whom do we salute?

J.B.T.

"How to Kill Yourself" in Two Easy Lessons

A recent issue of an airlines magazine carried an article entitled, "If Lily Tomlin is Our Mirror, Why are We Laughing?" It was a good report on a fine actress and the multiple characters she portrays, but the title was misleading, as its question was never answered, or even addressed. In fact, it probably was better left so, because though the question is intriguing, the answer is not simple. In the first place, "our" would have to be defined, and most folks might feel that though she might be somebody else's mirror, she could not possibly be theirs. But then it is hard to see our ridiculous side, which L.T. portrays so well.

Every one of us has an image he expects to see in the mirror, even though as we get older it becomes more and more difficult to maintain—which is often a prominent part of our ridiculous side. Fashion dictates we must be young, slim, healthy, and sun-tanned—especially sun-tanned. These days only a slob has that pasty indoor look. His "plus" is that he probably won't get a malignant melanoma.

It is generally recognized, even by sun-abusers, that the sun does all sorts of bad things to the skin. As a pathologist I look daily at its ravages. It activates the epidermis to bizarre proliferations, makes it scale and flake; it destroys elastic tissue, making your face fall down into bags and wrinkles. It makes basal cell and squamous cell carcinomas. And it makes malignant melanomas. It makes them on the exposed parts of those healthy non-slobs. It has become a minor epidemic.

When I started my pathology training 30 years ago, malignant melanoma was a rarity. We saw two or three a year; mostly they were nodular and rapidly fatal, though the prognosis of malignant melanoma has always been notoriously difficult to determine. Now we are seeing several a month. They are primarily of the superficial

spreading type, with a good number of malignant lentigines, or Hutchinson's freckles. Early, and with adequate excision, these carry an excellent prognosis. Untreated, they become nodular and act as nodular melanomas always have—bad.

A Texas Tumor Registry epidemiologic study of 3,000 malignant melanomas a couple of years ago showed the incidence to be directly related to latitude, being considerably higher, for example, in Houston than in Amarillo. The only factor which could be correlated with this finding was the intensity of actinic radiation. There has been a progressive yearly increase in incidence in all latitudes.

The association of malignant melanoma with actinic radiation is clear. The reason for the steady increase is not. One must assume either that there has been a progressive increase in exposure of skin surface to the sun, or that radiation—ultraviolet radiation—is increasing. Perhaps, as many claim, release of fluorocarbons into the atmosphere by spray cans is indeed destroying sunlight's natural filter, the ozone layer. The evidence apparently is convincing enough because spray cans have been banned.

Now that summer is upon us, it is our obligation to make these facts known. Human nature being what it is, though, it may do no good. The other day, I saw in a store an "Emergency Ration" consisting of a cigarette in a glass tube for carrying in purse or pocket for those times when you're out of cigarettes and "have an uncontrollable urge *to kill yourself*."

A pasty-faced cowboy would look lousy in a cigarette ad.

J.B.T.

Mary Northern's Feet

Every now and then during the bicentennial someone would trot out an 18th century newspaper to present a news story of the day. The newspaper was always striking in its simplicity. No frills. Just simple—and brief—reporting, with a brief headline. A few advertisements, and that was it. There were none of the gross sensationalism and affronts to the aesthetic sensibilities so common today, which appear occasionally in even the most moderate newspapers. The function of the newspapers was recognized as simply to report the news. They did not manufacture news.

Modern technology changed all that. Investigative reporting was born. There were deadlines to

be met every day as reams of cheap newsprint, replete with wire-photos from the syndicates, sped through the high-speed presses to be carried by trucks, then later by air, to increasingly distant parts. There was space to fill in newspapers to be sold for the sake of selling newspapers for the sake of making money for their publishers. Sensationalism became an end in itself.

Television has changed it all again. There are now deadlines all day long, and news is shown vividly, often too vividly, as it happens. We can watch people being incinerated, drowned, maimed—all in the comfort of our own living room.

Nashville viewers were recently subjected to a serialized horror story which I will entitle "Mary Northern's Feet." Mary Northern was once an attractive, prosperous young lady, now become an ancient recluse living in one room of her decaying home without utilities. Her feet became frost-bitten, and she was removed under protest to a hospital, where amputation was advised but refused. Because TV's investigative reporters couldn't leave the subject alone, it came before the city several times a day, as the saying goes "big as life and twice as ugly," in color and with the usual inane interviews and comments, and Mary Northern's feet became a *cause celebre* of the civil libertarians on the one side and the do-gooders on the other. By the time the case cleared the U.S. Supreme Court, her feet had lost their gangrenous flesh in the whirlpool and were healing (the state insists they would have been better amputated), her general condition was stable, and she had lost her Social Security benefits because she was receiving Medicaid in the hospital. Now she is faced with astronomical legal fees and hospital bills for services she tried her best to avoid.

Mary Northern has been badgered by various agencies and the news media and subjected to medical procedures she did not want. But she was possibly saved from dying and she has her feet, or parts of them, so perhaps for Mary Northern the whole matter will be a trade-off, provided she is not taken to the cleaners financially.

There was at least one clear loser in this whole affair, though there are also some marginal losers, such as all of us taxpayers and Mary Northern's hard-working attorney if, as she insists, she accepts no compensation for the many hours she has put on the case. But a very real loser is her doctors, who could not win.

This is not a critique of Mary Northern's medical care, as I have neither firsthand knowledge

of the case nor competence on which to base a decision (though I have as much as the people who ultimately made the decisions), and in fact the method of handling such cases appears to be controversial. As it turned out, the results of treatment counter to her doctors' advice were possibly no worse than if that advice had been followed. But the point is that after the initial moments, Mary Northern's treatment was dictated by nonmedical personnel—the courts.

There is a larger philosophical issue here with which I do not care to deal at this time, but it is that the decision hinged not on the right of an individual to refuse treatment, which is clearly established legally, and which nobody denied. As consent or refusal must be informed consent or refusal, though, was her refusal based on understanding? Will an individual be considered competent to decide, should he choose wrong (in this case in the eyes of the Department of Human Welfare)? *Res ipse loquitur*, so to speak.

Mary Northern's doctors, because of the life-threatening nature of her illness, did not have the option of refusing to treat her, so they were left with only the option of treating her by methods contrary to their best judgment. Whatever the outcome, they were bound to lose.

The media, who basically wrote the script, got a lot of mileage out of Mary Northern. Because she filled up countless minutes of viewing time and columns of newsprint, I have a solution to Mary Northern's financial difficulties. She should be put on a pension for life by the media.

An unbiased observer of this tragi-comedy opined that this is just one more bit of evidence that the whole trouble with society is that there is usually only about 15 minutes worth of news every day, but the TV stations are given two hours to fill. So they fill it.

J.B.T.

May 1, 1978—*Mary Northern, R.I.P.*—Ed.

new members

The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

COFFEE COUNTY MEDICAL SOCIETY

Robert M. Canon, M.D., Tullahoma

Sandi Shukla, M.D., Tullahoma

Harrison Y. N. Yang, M.D., Manchester

KNOXVILLE ACADEMY OF MEDICINE

Robert L. Barnes, III, M.D., Knoxville

Frank Benton Gray, M.D., Knoxville

John C. Hoskins, M.D., Knoxville

George M. Krisle, III, M.D., Knoxville

Eugene B. Linton, M.D., Knoxville

J. Barret Matthews, M.D., Knoxville

MACON COUNTY MEDICAL SOCIETY

Pleas Copas, Jr., M.D., Lafayette

McMINN COUNTY MEDICAL SOCIETY

Samuel K. Bouchillon, M.D., Etowah

Shelley F. Griffith, M.D., Athens

G. E. Rozar, Jr., M.D., Athens

MONTGOMERY COUNTY MEDICAL SOCIETY

Greer A. Busbee, III, M.D., Clarksville

William David Hudson, III, M.D., Clarksville

Edwin C. Jordan, M.D., Clarksville

V. Tupper Morehead, M.D., Clarksville

James R. Shamblin, M.D., Erin

NASHVILLE ACADEMY OF MEDICINE

Richard T. Coppoletti, M.D., Nashville

Krishna D. Ghosh, M.D., Nashville

Y. Nithyananda Pakkala, M.D., Nashville

William M. Petrie, M.D., Nashville

Mitchell K. Sanders, M.D., Nashville

Michael B. Seshul, Sr., M.D., Nashville

William R. Thompson, M.D., Nashville

John E. VanHooydonk, M.D., Nashville

NORTHWEST TENNESSEE ACADEMY OF MEDICINE

Robert D. Trevathan, M.D., Martin

ROANE-ANDERSON COUNTY MEDICAL SOCIETY

Roland T. Muench, M.D., Oak Ridge

SEVIER COUNTY MEDICAL SOCIETY

Roger F. Galloway, M.D., Gatlinburg

SULLIVAN-JOHNSON COUNTY MEDICAL SOCIETY

Arthur M. Boyd, M.D., Kingsport

William S. Credle, M.D., Bristol

Robert M. Greer, M.D., Kingsport

Juan Gondo, M.D., Kingsport

Jerry L. Miller, M.D., Kingsport

Kenneth J. Robertson, M.D., Kingsport

James W. Wolfe, M.D., Kingsport

WASHINGTON-CARTER-UNICOI COUNTY MEDICAL ASSOCIATION

Atef A. Ibrahim, M.D., Elizabethton

personal news

Fenwick Chappell, M.D., Memphis, was the lucky winner of the exhibit attendance prize (a 19 inch color television set) at the TMA Annual Meeting. To become eligible for the prize drawing, a TMA member must visit the majority of the exhibits.

Amos Christie, M.D., Nashville, professor emeritus of pediatrics and former chairman of the Department of Pediatrics at Vanderbilt University Medical

Center, received an award for his contributions in the field of mental health at the Second Annual Luton Award Dinner, held April 16 at the Barn Dinner Theater.

At the TMA Annual Meeting, three prominent physicians received the "Distinguished Service Award" recognizing their contributions to medicine. *Albert W. Diddle, M.D.*, Knoxville, was cited for his distinguished career as a teacher-author in his medical specialty of obstetrics and gynecology. He has written more than 130 articles in medical journals and is the author of the chapter in *Benson's Text Book* on "Surgical and Medical Complications in Gynecology." *I. Lee Arnold, M.D.*, Chattanooga, was honored for being the founder of the Chattanooga Ophthalmology Foundation and for establishing the Eye Institute in Chattanooga. *Oscar McCallum, M.D.*, Henderson, was honored for his continuing efforts to expand the medical specialty of family practice throughout the state of Tennessee.

John B. Dorian, M.D., Memphis, was installed as President of the Tennessee Medical Association during the Annual Meeting. *James W. Hays, M.D.*, Nashville, was elected president-elect. Elected to serve three-year terms on the TMA Board of Trustees were *Clarence C. Woodcock, M.D.*, Nashville; *Gilbert A. Rannick, M.D.*, Johnson City; *Tinnin Martin, Jr., M.D.*, Memphis; and *Robert E. Clendenin, Jr., M.D.*, Union City. Elected as speaker of the House of Delegates was *Allen S. Edmonson, M.D.*, Memphis, and elected as vice-speaker was *Charles E. Allen, M.D.*, Johnson City. Elected to serve the Association as regional vice-presidents were *Edmund W. Benz, M.D.*, Nashville-Middle Tennessee; *Bennett Y. Cowan, M.D.*, Bristol-East Tennessee; and *Hobart H. Beale, M.D.*, Martin-West Tennessee. Elected to serve two-year terms as Councilors were *Nat E. Hyder, Jr., M.D.*, Johnson City-First District; *James R. Royal, M.D.*, Chattanooga-Third District; *Anne U. Bolner, M.D.*, Fayetteville-Fifth District; *Kenneth J. Phelps, Sr., M.D.*, Lewisburg-Seventh District; and *Arden J. Butler, Jr., M.D.*, Chairman, Ripley-Ninth District. Elected to serve as Delegates from Tennessee to the American Medical Association House of Delegates were *John H. Burkhardt, M.D.*, Knoxville; *Thomas K. Ballard, M.D.*, Jackson; *Morse Kochtitzky, M.D.*, Nashville, who will fill the term of Tom Nesbitt, M.D., who has resigned. Serving as alternate delegates will be *David H. Turner, M.D.*, Chattanooga; *E. Kent Carter, M.D.*, Kingsport; and *Charles B. Thorne, M.D.*, Nashville.

The following TMA members have been named Fellows of the American Academy of Orthopedic Surgeons: *Neil E. Green, M.D.*, *David Scott Jones, M.D.*, *Michael A. Milek, M.D.*, and *William G. Sale, M.D.*, all of Nashville.

Francis F. Fountain, M.D., Memphis, has been elected president of the medical staff at the University of Tennessee Hospital. Other UT Hospital officers elected were *Mark S. Soloway, M.D.*, president-

elect; and *Richard L. Boswell, M.D.*, secretary-treasurer.

George Baker Hubbard, M.D., Jackson, was elected as the "Outstanding Physician of the Year" by the TMA House of Delegates. Dr. Hubbard was honored for his dedicated service to many medical organizations for the past 25 years. He was recognized for his foresight in establishing the Jackson Clinic, one of the first multispecialty clinics in Tennessee.

The following TMA members have been named Fellows of the American College of Surgeons: *Joseph H. Kurre, Jr., M.D.*, and *Fred D. Slaughter, M.D.*, both of Bristol.

Mrs. Frances Meeker was the recipient of the TMA "Community Service Award" at the TMA Annual Meeting, recognizing her outstanding achievement in medical news reporting as a feature writer for the *Nashville Banner* for the past ten years.

medical news in tennessee

UTCHS Names New Dean

Dr. James C. Hunt, chairman of the Department of Medicine at Mayo Clinic, has been named dean of the University of Tennessee College of Medicine. Hunt's appointment was announced by Dr. T. Albert Farmer, Jr., chancellor of UTCHS in Memphis.

A 1953 graduate of Bowman Gray School of Medicine at Wake Forest College in Winston-Salem, N.C., Dr. Hunt has been on the faculty of Mayo Graduate School of Medicine since 1959.

Dr. Hunt succeeds Dr. Charles B. McCall, who resigned in 1977 to become dean of the College of Medicine at Oral Roberts University in Tulsa, Okla. Dr. E. William Rosenberg has been acting dean since Dr. McCall's resignation.

national news

From the AMA's Office in Washington, D.C.

NHI Update

Senator Edward M. Kennedy, organized labor's champion for its brand of national health insurance (NHI), is reported backing away from his original proposal for total federal domination of health care financing.

While President Carter plans to stick by his campaign promise to labor for an administration-backed NHI proposal, it has become clear in all quarters that the Health Security Act—the organized labor and Kennedy sponsored plan—has no chance whatsoever of passage due to its price tag alone.

The significant strategy change is designed to boost chances for enactment of an NHI bill within the next few years to hitch labor in tandem with the Carter administration on the issue.

The administration is expected soon to release a position paper staking out the type of NHI plan the President wants approved.

Labor made a strenuous effort earlier to get the administration to support its Health Security Act, but the administration balked, telling labor leaders such a plan was too expensive and could not win congressional endorsement.

Fearing that NHI was in danger of collapsing altogether unless a united front could be formed on a single approach, labor leaders and Kennedy went to President Carter with the word they would end their years-long policy of insisting on an NHI plan calling for complete federalization of the financing.

Labor now says it will accept an NHI plan that provides a rule for private health insurance carriers, who would have been wiped out under the Health Security Act. Officials of the AFL-CIO and the United Automobile Workers accompanied Kennedy in notifying Carter of the policy reversal.

Whatever plan Carter endorses, it will need all the help it can get. Congress has been shaken by the uproar over increasing Social Security taxes and is reluctant to embark on any expensive new social program at this time due to the fiscal plight of the treasury and the threat of double-digit inflation just around the corner.

Feds' Favorite Fun: Chop Docs

The AMA immediately branded a White House Wage-Price Stability Council report on soaring physician fees a "political hatchet job."

"The report is built on old data and faulty research," James H. Sammons, AMA executive vice president said.

The report said doctor bills are increasing half again as fast as the overall inflation rate and that the situation may get worse. It also accused the AMA of trying to limit the number of doctors in practice.

"We are incredulous that this unit of the executive branch of the government would publish a press release and summary report that is not substantiated in the body of the report itself," Dr. Sammons said.

He said the AMA has actively worked to increase the number of medical schools and practicing physicians in this country. "Almost 16,000 doctors are now graduated from U.S. medical schools each year, about double the number of five to seven years ago," Dr. Sammons said, adding that the charge is "just plainly ridiculous."

He said the data about physicians' income and fees in the report are incorrect.

The study said that two years ago the median income of physicians was \$63,000. The AMA, which yearly publishes statistical studies of medical practices, says the projected median for 1976 was \$54,000 and that the actual median before taxes, for

1975 was \$50,337. "That's not even close to the incredible figures being used" in the report, he said.

Sammons also criticized the report for the inadequate reporting of facts and statistical data, the inappropriate interpretation of historical information, the use of data to present only partial conclusions on changes in physicians' fees, and failing to recognize private initiatives that are working to restrain the rate of increase in overall health care costs.

"The AMA will address other issues in the report as they are analyzed by staff," Dr. Sammons said. "We have not, and will not, avoid the issue of physicians' fees. We have already joined with other segments of the private sector, including physicians, hospitals, and insurers, and have taken steps to seek answers to the overall health care cost question through studies done by the National Commission on the Cost of Medical Care and the 'Voluntary Effort' program."

"But with documents like this being issued by the government," Sammons said, "it looks like we will have to continue bearing the brunt of finding constructive answers ourselves. We hope that the Council's allegations will not be used in an attempt to discredit or destroy these important private initiatives."

The National Commission on the Cost of Medical Care was established as an independent body by the AMA in 1975 and recently issued a report and 48 recommendations for restraining health care costs. The association will be responding to these recommendations during its 1978 Annual Convention in June.

FTC Power Play Still Alive

The Federal Trade Commission has charged that the nation's Blue Shield plans are dominated by physicians—"an arrangement that may reduce competition and raise prices artificially."

FTC Chairman Michael Pertschuk told the Interstate and Foreign Commerce Committee's Subcommittee on Oversight and Investigations that "... it is difficult to see how the public interest can be served by such an apparent conflict of interest."

He said that an ongoing FTC investigation has found that "most" of the 72 Blue Shield plans are controlled by local medical societies, other physicians' groups of "self-perpetuating physicians boards" set up to run the plans.

Subcommittee member Albert Gore, Jr., (D-Tenn.) said that many members of Blue Shield Boards of Directors "also serve on the boards of banks and lending institutions holding Blue Shield funds. These persons also have a direct interest in seeing that these financial institutions make a profit. I believe this practice is unconscionable and is an abuse of the health plans' obligations to their customers," Gore said.

"It also poses an even more serious potential for abuse of the federal Medicare and Medicaid programs. Funding for these programs is distributed through Blue Shield organizations under contract

with the federal government," the Tennessee representative said.

The FTC chairman said his agency was limited in the actions it could take against insurance firms and non-profit institutions. The FTC lobbied hard in the last session of Congress for expanded authority, but the proposal to give the agency powers against non-profit institutions did not clear the House Commerce Committee.

Mr. Pertschuk acknowledged the need for physician input into the management of Blue Shield plans but said, "there is the danger that even a small bloc of physicians could dominate a larger group of lay people. And in light of the fact that commercial health insurers are able to provide medical coverage without physician directors, it is not obvious that any physician participation in decision-making functions—as opposed to advisory functions—is necessary at all."

The FTC chairman again made a strong pitch for expanded agency authority, saying that the FTC act "should be modified to give the Commission jurisdiction over all business entities, regardless of whether or not they are organized for profit."

HEW Does It Again: Medicare Payment Lists Out

The Health, Education and Welfare Department will release a list of all Medicare payments to all physicians despite warnings from both congressmen and the AMA that a simple listing of dollar amounts paid to physicians, with no indication of the number of patients treated and the services provided for those payments, is essentially meaningless.

The list, to be available for public inspection, containing the names of some 300,000 physicians who provided services to Medicare-eligible patients during 1977 and reported to be some five feet thick and costing "perhaps as much as \$1 million"—will tell nothing about the physicians named, the kinds of care they provide, their actual earnings, or the patients they serve.

The list will not indicate, for example, that across the country the doctors actually received, in Medicare reimbursement, only about 58% of the amount of covered charges actually billed for providing medical services to persons whose care is paid for by Medicare.

In a letter of protest to HEW Secretary Joseph Califano, AMA Executive Vice President James H. Sammons pointed out that "There is no cost-benefit ratio in what HEW is doing. The interests of neither the public nor the profession are served by this type of reporting."

Dr. Sammons spells out in the letter many of the flaws and downright inaccuracies of a list compiled in such a fashion. For example, the list will not make clear that in many instances the payment for covered services made directly to patients who are then supposed to pay the physicians, but often do not. The physicians are credited by the HEW list with having received all moneys paid for services

which they provided, but in countless instances they may have received only a part of it, or none of it.

Dr. Sammons said ". . . the list will not explain that certain specialists such as cardiologists, internists, urologists, nephrologists, surgeons, ophthalmologists or orthopedists will naturally have large numbers of elderly or chronically ill among their patients, all covered by Medicare. Nor will it indicate that physicians located in Florida, Arizona, California and certain other states are far more likely to have a Medicare-eligible patient profile than would be the case in other parts of the country."

"Even if it were made clear that many physicians justifiably derive a significant part of their income from services rendered to patients covered by Medicare, the figure—though it may appear sizable—will in no way represent the physicians' net income. The most current figures available show physician overhead averaging 40% of gross income, with general practitioners, family physicians and pediatricians supporting operating expenses even greater than 40%.

Rep. Thomas Luken (D-Ohio) has also labeled as "objectionable" the HEW list.

In a letter to Secretary Califano, Luken said the disclosure "could be deceptive, expensive, and open to a significant rate of error!"

The liberal Democrat, a member of the House Commerce Committee said that Medicare payments often are submitted to individual physicians on behalf of a hospital or clinic. "On such occasions, the HEW listing will not designate the specific physician who worked with Medicare patients. As a result, the list could be deceptive, and would not offer a clear comparison of the actual payments received by the individual physician," said Luken.

He told Califano that "it has been estimated that this undertaking will cost the federal government from \$750,000 to \$1 million, and some \$300,000 annually thereafter. Moreover, additional expense must be borne by the carriers, such as Blue Shield.

Luken concluded: "I am not opposed to public disclosure of the use of federal moneys. Yet, in considering the possible inaccuracies, imprecise reporting, and expense associated with this project, I respectfully request your reconsideration of this proposal."

Cost Containment Courses Coming

"Giving physicians in training a greater sense of cost awareness can play a major role in restraining future medical care costs," James H. Sammons, M.D., AMA executive vice president, said at a meeting of the National Steering Committee of the Voluntary Cost Containment Program.

"Education in the economics of health care for physicians, both in training and in practice, and the active involvement of the hospital medical staff in cost containment efforts are two major ways of aiding the fight against the high cost of health care," Dr. Sammons said.

The "VE" Steering Committee meeting, the fourth since its inception in December, focused on the role

of physicians in containing health care costs and how to assist the public in becoming more informed about health costs and health care choices.

The need for more use of outpatient hospital and ambulatory surgery by doctors was also discussed. "The chief of staff in each hospital has to establish a climate of cost awareness," said Robert B. Hunter, M.D., chairman of the AMA Board of Trustees and cochairman of the national steering committee. "Doctors have to ask: Is this hospitalization necessary? How many days should this patient be in the hospital? Are all diagnostic studies and therapeutic measures necessary?" Hunter told the committee.

The committee is developing a plan to (1) educate physicians to become more aware of the cost impact of patient services they order, (2) show them how high quality care might be provided at the lowest possible cost, and (3) motivate physicians to operate in the most cost-efficient mode.

Hunter also commended the 13,000-member AMA Resident Physician Section for encouraging the development of local cost awareness programs through workshops and conferences and for the planned publication of a workbook outlining successful cost restraint activities in teaching hospitals.

The National Steering Committee was organized by the AMA, American Hospital Association and the Federation of American Hospitals in response to a challenge by Rep. Daniel Rostenkowski (D-Ill.) last November calling for the private sector to take the initiative to voluntarily contain health care costs.

The major national goals of the committee include a reduction in the rate of increase in hospital costs of two percentage points a year over the next two years; no net increase in hospital beds in 1978; restraint of new hospital capital investment during the next two years, and tightened utilization review procedures by physicians.

Health care providers in all 50 states have agreed to participate in the national program through state level committees. On Jan. 11, the three organizations mailed 23,000 letters to board chairmen, medical staff chiefs and administrators of every hospital in the nation explaining the voluntary effort and urging support for the program.

HSA's Breed SHCC's Breed Bedlam

HEW has issued final regulations governing the designation and funding of State Health Planning and Development Agencies (state agencies) and Statewide Health Coordinating Councils (SHCCs).

HEW, 59 state agencies—including Puerto Rico, the District of Columbia, and U.S. territories—have been designated to conduct state health planning activities under the National Health Planning and Resources Development Act (P.L. 93-641). The final regulations have been published in the *Federal Register*. The regulations permit the coordinating councils to recommend revisions in the annual implementation plans of the Health Systems Agencies (local planning bodies) within a state.

In an attempt to clarify the relationships between the state agencies and the coordinating councils, the

regulations require that the councils furnish guidance towards development of state health plans and encourage that they seek state agency staff review and comment on the state plans and applications for the receipt of federal health funds in the state.

The regulations have been further revised to make optional the performance of local planning functions by small states and territories which are exempt from designating health service areas and establishing health systems agencies.

HMOs—Medicine of Tomorrow?

More than 1,000 businessmen and labor leaders attended an HEW-sponsored pep rally on HMOs in Washington and returned home convinced that prepaid group medical practice was the "medicine of tomorrow" if the administration could so shape it that way.

The conference was called by the Carter administration in a frank effort to bally-hoo HMOs and spur business and labor to establish them. Death knells weren't sounded for fee-for-service and third party insurance, but most of the speakers agreed that prepaid group care promises to become the medical service used by most Americans.

However, the speakers also agreed that it will be a hard task to sell the public on HMOs because by and large people are satisfied with the medical care they receive today. Still, they proclaimed, HMOs not only promise better quality care, but save money by reducing the incentive to hospitalization inherent in third party payment.

HEW Secretary Joseph Califano said HMOs can reduce outpatient visits by 15% and hospitalization by 30% to 60%. "None of this is to say that doctors or hospital officials wear black hats; only that people and institutions respond predictably to built-in incentives, and those incentives go the wrong way in the health economy."

"We intend this to be primarily the private sector's effort," Califano said, adding a blunt threat that "I need not tell you that this may be one of the last chances for American free enterprise to tackle the task."

Among those attending the session were representatives of 320 corporations and 350 unions.

announcements

CALENDAR OF MEETINGS NATIONAL 1978

- | | |
|-----------|--|
| May 21-25 | American Urological Association, Hilton Hotel, Washington, D.C. |
| May 24-27 | American College of Sports Medicine, Capital Hilton, Washington, D.C. |
| May 1978 | American Academy of Facial Plastic and Reconstructive Surgery, The Breakers, Palm Beach, Florida |

- June 1-3 American Rhinologic Society, Mayo Clinic, Rochester, Minnesota
- June 4-8 American Association of Immunologists, Hyatt House, Atlanta
- June 11-13 American Diabetes Association, Sheraton Boston, Boston
- June 11-15 American Society of Colon and Rectal Surgeons, Town & Country Hotel, San Diego
- June 14-18 American Medical Women's Association, Cheshire Inn and Lodge, St. Louis
- June 17-22 American Medical Association, 127th Annual Convention, St. Louis
- June 27-30 Society of Nuclear Medicine, Disneyland Hotel, Anaheim, California
- June 29- July 1 National Conference on Nutrition in Cancer, Washington Plaza Hotel, Seattle
- July 21-25 American Association for Clinical Immunology and Allergy, Newporter Inn, Newport Beach, California
- July 30- Aug. 3 National Medical Association, Hilton Hotel, Washington, D.C.

STATE

- May 25 Middle Tennessee Medical Association, Murfreesboro Country Club, Murfreesboro, Tennessee
- June 14-15 Upper Cumberland Medical Society, Hotel Donoho, Red Boiling Springs, Tennessee

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Brief Summary of Prescribing Information Combined TEGOPEN® (cloxacillin sodium) Capsules and Oral Solution

For complete information, consult Official Package Circular. (12) TEGOPEN 9/11/75

Indications: Although the principal indication for cloxacillin sodium is in the treatment of infections due to penicillinase-producing staphylococci, it may be used to initiate therapy in such patients in whom a staphylococcal infection is suspected. (See Important Note below.)

Bacteriologic studies to determine the causative organisms and their sensitivity to cloxacillin sodium should be performed.

Important Note: When it is judged necessary that treatment be initiated before definitive culture and sensitivity results are known, the choice of cloxacillin sodium should take into consideration the fact that it has been shown to be effective only in the treatment of infections caused by pneumococci, Group A beta-hemolytic streptococci, and penicillin G-resistant and penicillin G-sensitive staphylococci. If the bacteriology report later indicates the infection is due to an organism other than a penicillin G-resistant staphylococcus sensitive to cloxacillin sodium, the physician is advised to continue therapy with a drug other than cloxacillin sodium or any other penicillinase-resistant semi-synthetic penicillin.

Recent studies have reported that the percentage of staphylococcal isolates resistant to penicillin G outside the hospital is increasing, approximating the high percentage of resistant staphylococcal isolates found in the hospital. For this reason, it is recommended that a penicillinase-resistant penicillin be used as initial therapy for any suspected staphylococcal infection until culture and sensitivity results are known.

Cloxacillin sodium is a compound that acts through a mechanism similar to that of methicillin against penicillin G-resistant staphylococci. Strains of staphylococci resistant to methicillin have existed in nature and it is known that the number of these strains reported has been increasing. Such strains of staphylococci have been capable of producing serious disease, in some instances resulting in fatality. Because of this, there is concern that widespread use of the penicillinase-resistant penicillins may result in the appearance of an increasing number of staphylococcal strains which are resistant to these penicillins.

Methicillin-resistant strains are almost always resistant to all other penicillinase-resistant penicillins (cross-resistance with cephalosporin derivatives also occurs frequently). Resistance to any penicillinase-resistant penicillin should be interpreted as evidence of clinical resistance to all, in spite of the fact that minor variations in *in vitro* sensitivity may be encountered when more than one penicillinase-resistant penicillin is tested against the same strain of staphylococcus.

Contraindications: A history of a previous hypersensitivity reaction to any of the penicillins is a contraindication.

Warning: Serious and occasionally fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin therapy. Although anaphylaxis is more frequent following parenteral therapy it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with a history of sensitivity to multiple allergens.

There have been well documented reports of individuals with a history of penicillin hypersensitivity reactions who have experienced severe hypersensitivity reactions when treated with a cephalosporin. Before therapy with a penicillin, careful inquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins, and other allergens. If an allergic reaction occurs, the drug should be discontinued and the patient treated with the usual agents, e.g., pressor amines, antihistamines, and corticosteroids.

Safety for use in pregnancy has not been established. **Precautions:** The possibility of the occurrence of superinfections with mycotic organisms or other pathogens should be kept in mind when using this compound, as with other antibiotics. If superinfection occurs during therapy, appropriate measures should be taken.

As with any potent drug, periodic assessment of organ system function, including renal, hepatic, and hematopoietic, should be made during long-term therapy.

Adverse Reactions: Gastrointestinal disturbances, such as nausea, epigastric discomfort, flatulence, and loose stools, have been noted by some patients. Mildly elevated SGOT levels (less than 100 units) have been reported in a few patients for whom pretherapeutic determinations were not made. Skin rashes and allergic symptoms, including wheezing and sneezing, have occasionally been encountered. Eosinophilia, with or without overt allergic manifestations, has been noted in some patients during therapy.

Usual Dosage: Adults: 250 mg. q. 6h.

Children: 50 mg./Kg./day in equally divided doses q. 6h. Children weighing more than 20 Kg. should be given the adult dose. Administer on empty stomach for maximum absorption.

N.B.: INFECTIONS CAUSED BY GROUP A BETA-HEMOLYTIC STREPTOCOCCI SHOULD BE TREATED FOR AT LEAST 10 DAYS TO HELP PREVENT THE OCCURRENCE OF ACUTE RHEUMATIC FEVER OR ACUTE GLOMERULONEPHRITIS.

Supplied: Capsules—250 mg. in bottles of 100, 500 mg. in bottles of 100. Oral Solution—125 mg./5 ml. in 100 ml. and 200 ml. bottles.



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Syracuse, New York 13201

The continuing medical education accreditation program of the TMA has full approval by the Liaison Committee on Continuing Medical Education. An accredited institution or organization may designate for Category 1 credit toward the AMA Physician's Recognition Award those CME activities that meet appropriate guidelines. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Ave., Nashville, TN 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

IN TENNESSEE

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman, can plan an individualized program of one to four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, ward rounds, learning individual procedures, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

Participating Departments and Divisions

Allergy & Immunology	Samuel Marney, M.D.
Anesthesiology	Bradley E. Smith, M.D.
Cardiology	Gottlieb C. Friesinger, III, M.D.
Chest Diseases	James D. Snell, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Dermatology	Lloyd King, M.D.
Diabetes	Oscar B. Crofford, M.D.
Endocrinology	David Rabin, M.D. David N. Orth, M.D.
Gastroenterology	Steven Schenker, M.D.
General Internal Medicine	W. Anderson Spickard, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.
Medicine	Grant W. Liddle, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Oncology	Robert Oldham, M.D.
Orthopedics	Paul W. Griffin, M.D.
Pathology	William H. Hartmann, M.D.
Pediatrics	David T. Karzon, M.D.

Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Everette James, Jr., Sc.M., J.D., M.D.
Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sergent, M.D.
Surgery	
Cancer Chemotherapy	Vernon H. Reynolds, M.D.
General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neill, M.D.
Plastic	John B. Lynch, M.D.
Renal Transplantation	Robert E. Richie, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.

Eligibility: All licensed physicians are eligible.

Administrative Fee: \$200.00 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1) and American Academy of Family Physician's Continuing Education accreditation.

Application: For further information and application, contact: Paul E. Slaton, M.D., Director, Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

Continuing Education Schedule 1978

May 29- June 3	Annual Family Practice Intensive Review (40 hours)
June 25-30	Pharmacokinetics
July 6-9	Contemporary Clinical Neurology—Hilton Head, S.C. (16 hours)
July 10-12	Diagnostic Sonography Update: 1978 (20 hours)
Sept. 15-16	9th Annual Pediatric Symposium—Recent Advances in Therapy and Prevention of Infectious Diseases
Sept. 21-22	Postgraduate Course in Allergy
Sept. 27-30	Symposium on Diagnostic Imaging
Fall, 1978	Parenteral Alimentation
Fall, 1978	Update in Management of Urologic Tumors

For information contact: Vanderbilt Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

MEHARRY MEDICAL COLLEGE SCHOOL OF MEDICINE

Extended Continuing Education Program

Arrangements have been made with the following services and departments in the medical school to allow practicing physicians to participate in that service's activities for a period of one to four weeks. This program provides an opportunity for physicians to study in depth for a specified period. The schedule of activities is individualized in re-

sponse to the physician's request by the participating department. The experience includes conferences, ward rounds, audiovisual materials and contact with patients, residents and faculty.

Participating Departments

Anesthesiology	Ramon S. Harris, M.D.
Family Practice	John Arradondo, M.D.
Internal Medicine	
Cardiology	John Thomas, M.D. Kermit R. Brown, M.D. Qamar A. Kahn, M.D.
Chest Disease	Joseph M. Stinson, M.D. Paul A. Talley, M.D. Edward A. Mays, M.D.
Dermatology	Thomas W. Johnson, M.D. David Horowitz, M.D.
Gastroenterology	Ludwald O. P. Perry, M.D. Buntwal M. Somayaji, M.D.
General Medicine	Edward A. Mays, M.D.
Hematology/Oncology	Robert S. Rhodes, M.D. Robert S. Hardy, M.D.
Neurology	Calvin L. Calhoun, Sr., M.D. Gregory Samaras, M.D.
Obstetrics & Gynecology	Henry W. Foster, M.D.
Gynecological Endocrinology	Elwyn M. Grimes, M.D.
Ophthalmology	Axel C. Hansen, M.D.
Orthopedics	Wallace T. Dooley, M.D.
Pathology	Louis D. Green, M.D. John C. Ashhurst, M.D.
Pediatrics	E. Perry Crump, M.D.
Surgery	
General	Louis J. Bernard, M.D.
Neurological	Charles E. Brown, M.D.
Thoracic and Cardiovascular	David B. Todd, M.D. Ira D. Thompson, M.D.
Urology	Marcelle R. Hamberg, M.D.

Fee: \$100 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1), American Academy of Family Physicians Continuing Education Accreditation and Continuing Education Units by Meharry Medical College.

Application: For further information contact Frank A. Perry, M.D., Director, Continuing Education, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

Continuing Education Schedule

May 24-26	Internal Medicine—1978 (24 hours)
October	Cleve Ewell Hematology Seminar (6 hours)

For information contact Frank A. Perry, M.D., Director of CME, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

UNIVERSITY OF TENNESSEE CLINICAL EDUCATION CENTER Chattanooga

Continuing Education Schedule 1978

June 1-3	Basic Cardiology, EKGs & Therapy for the Primary Care Physician—Chattanooga
June 14-19	OB/GYN Emergencies — Humacao, Puerto Rico

For information contact: LeRoy J. Pickles, Director, Continuing Medical Education, Suite 400, 921 E. 3rd St., Chattanooga, TN 37403, Tel. (615) 756-3370.

UNIVERSITY OF TENNESSEE CENTER FOR THE HEALTH SCIENCES Knoxville Unit

Feb.-June Update in Obstetrics for Physicians—
1st Friday University of Tennessee Memorial Re-
each month search Center and Hospital, Knoxville.
Credit: 8½ hours AMA Category 1
and AAFP elective. *Fee:* None (limited registration).

For information contact I. Ray King, M.D., or Mrs. Molly Meighan, Regional Perinatal Office, Drawer 26, 1924 Alcoa Hwy., Knoxville, TN 37920, Tel. (615) 971-3100.

IN SURROUNDING STATES

UNIVERSITY OF KENTUCKY Mini-Residencies for Medical and Surgical Practitioners in Office Management Of Emotional Problems

The objective of this course is to give physicians an ideal emotional counseling technique that fits busy office practices. The technique uses a concept of emotions that is consistent with human anatomy and psycho-physiology. Yet, the technique requires no more physician time or patient cost than routine evaluations of new patients. Finally, the technique is readily understandable and easy for practitioners to apply.

One, two and three week courses. Minimum of 40 hours per week. **Tuition Fee:** \$350 per week for the 1st & 2nd week of training; \$500 for 3rd week of supervised practice with patients in the Intensive RBT Treatment Program.

For further information contact: Maxie C. Maulsby, Jr., M.D., Office of Continuing Medical Education, Dept. of RBT, University of Kentucky, Lexington, KY 40506.

Continuing Education Schedule 1978

May 25-26	Cardiology for the Practicing Pediatrician—Hyatt Regency Lexington, Lexington, Ky. <i>Credit:</i> 12 hours AMA Category 1. <i>Fee:</i> \$85.
June 2-3	Fiberoptic Bronchoscopy: A Workshop—Hyatt Regency Lexington, Lexington, Ky. <i>Credit:</i> 13 hours AMA Category 1. <i>Fee:</i> \$250.
June 8-10	Wagensteen Symposium on Surgical Management of Visceral and Breast Cancer—Hyatt Regency Lexington, Lexington, Ky. <i>Credit:</i> 15 hours AMA Category 1. <i>Fee:</i> \$150.
Oct. 27-28	Fluid and Electrolyte Balance Made Simple—Hyatt Regency Lexington,

Lexington, Ky. *Credit:* 10 hours AMA Category 1. *Fee:* \$75.

June 25-30 Ninth Family Medicine Review (Sessions I, II, and III)—Hyatt Regency and Lexington, Lexington, KY. *Credit:* 50 hours AMA Category 1 and AAFP. *Fee:* \$295.

For information contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, KY 40506.

MEDICAL COLLEGE OF GEORGIA

June 15-17 Selected Topics in Internal Medicine—Jekyll Island State Park, Jekyll Island, Ga. *Credit:* 12 hours AMA Category 1 and AAFP prescribed. *Fee:* \$140 for entire program or \$50 per day.

For information contact: Division of Continuing Education, Medical College of Georgia, Augusta, GA 30901.

GEORGIA LUNG ASSOCIATION

June 14-18 Third Annual Symposium on Lung Disease—The Cloister, Sea Island, Ga.

For information contact Betty Rafshoon, Georgia Lung Association, 1383 Spring St., N.W., Atlanta, GA 30309, Tel. (404) 876-3601.

DUKE UNIVERSITY MEDICAL CENTER

July 31-Aug. 5 Current Concepts in Diagnostic Radiology including Ultrasound, CT Scanning and Nuclear Medicine—Atlantic Beach, N.C. *Credit:* 30 hours AMA Category 1. *Fee:* \$200.

For information contact Robert McLelland, M.D., Radiology-Box 3808, Duke University Medical Center, Durham, NC 27710, Tel. (919) 684-4397.

OF SPECIAL INTEREST

AMERICAN COLLEGE OF PHYSICIANS

A comprehensive schedule of continuing medical education activities for a 12-month period beginning in August, 1977, includes regional meetings and postgraduate courses to be held at various locations throughout the United States and Canada.

The ACP Regional Meetings, lasting one to four days, are designed for practicing internists and physicians in related fields. They bring new developments in the basic sciences and clinical medicine from major research centers to internists who are unable to travel to medical meetings outside of their state, and also provide a vehicle for local physicians to report to their colleagues on investigative work and clinical experiences in the wide scope of subject areas included in the practice of internal medicine.

The ACP Postgraduate Courses provide the opportunity for in-depth study in fields covered by internal medicine and its subspecialties. Averaging three to five days, they are directed toward practicing physicians and are presented in association with medical schools and other teaching institutions.

For information and registration contact: Registrar, Postgraduate Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

Postgraduate Courses

- May 22-24 Multidisciplinary Management of Solid Tumors—Rochester, Minn.
- May 22-24 Hematology Update 1978—Rochester, Minn.
- May 22-26 Review of the Old and New in the Diagnosis and Therapy of Infectious Diseases, New Orleans
- May 31-June 3 Clinical Cardiology—Update 1978—Vancouver, B.C.
- May 31-June 3 Neurology for Internists and Family Physicians—Winston-Salem, N.C.
- June 5-9 Internal Medicine: Recent Advances in Diagnosis and Treatment—Cincinnati
- June 14-17 Critical Care Medicine 1978—Banff, Alberta
- June 23-26 Infectious Diseases—Winnipeg, Manitoba
- July 10-12 Topics in Clinical Hematology V: Disorders of Proliferation and Maturation—Waterville, Me.
- July 13-15 Topics in Clinical Oncology V: Multidisciplinary Approaches to Difficult Cancer Problems—Waterville, Me.

AMERICAN CANCER SOCIETY— NATIONAL CANCER INSTITUTE

- June 29-July 1 National Conference on Nutrition in Cancer—Washington Plaza Hotel, Seattle. *Credit:* AMA and AAFP. *Fee:* None.

For information contact Sidney L. Arje, M.D., ACS-NCI, National Conference on Nutrition in Cancer, 777 Third Ave., New York, NY 10017, Tel. (212) 371-2900.

AMERICAN MEDICAL ASSOCIATION

Medical Staff Leadership Seminars—1978

- May 26-27 Plaza Hotel, New York
- Sept. 29-30 Fairmont Hotel, New Orleans
- Nov. 3-4 Eden Roc Hotel, Miami Beach
- Credit:* 14 hours AMA Category 1.

Fee: AMA member of medical society staff, \$150; nonmember, \$200.

For information contact AMA Department of Hospitals and Health Facilities, 535 N. Dearborn St., Chicago, IL 60610, Tel. (312) 751-6653.

**INTERNATIONAL ACADEMY OF CHEST
PHYSICIANS AND SURGEONS
(Affiliated with the ACCP)**

July 2-7 XIII World Congress on Diseases of the Chest—Kyoto International Conference Hall, Kyoto, Japan. *Fee:* ACCP members, \$120; nonmember physicians, \$140.

For information contact Alfred Soffer, M.D., Executive Director, American College of Chest Physicians, 911 Busse Hwy., Park Ridge, IL 60068, Tel. (312) 698-2200.

THE MENNINGER FOUNDATION

Workshops for Physicians and their Families

June 18-23 Physicians and their Families: An and Experience in Communication—YMCA of the Rockies, Estes Park, Colo. *Credit:* 25 hours AMA Category 1 and AAFP Prescribed. *Fee:* \$325 per family (parents and unmarried children under 21 years of age).

For information contact Erwin T. Janssen, M.D., Director of Division of Continuing Education, The Menninger Foundation, Box 829, Topeka, KS 66601, Tel. (913) 234-9566.

ASSOCIATION FOR HEALTH RECORDS

9th Annual Conference on Health Records

May 22-24 Measuring the Quality of Patient Care—Is it Worth the Cost? (cosponsored by American Association of Health Data Systems)—Detroit Plaza Hotel in the Detroit Renaissance Center.

For information contact W. H. Kincaid, Case Western Reserve University, School of Medicine, Cleveland, OH 44106, Tel. (216) 368-3737.

**INDIANA UNIVERSITY
INSTITUTE FOR SEX RESEARCH**

June 21-28 9th Annual Summer Program in Human Sexuality—Indiana University, Bloomington, Ind. *Fee:* \$325.

For information contact Institute for Sex Research-Summer Program, 416 Morrison Hall, Indiana University, Bloomington, IN 47401.

ESTES PARK INSTITUTE

The Estes Park Institute, a non-profit educational organization, will sponsor Hospital Medical Staff Conferences and Hospital Trustee Forums at the dates and locations below. *Credit:* 30 hours AMA Category 1 (each location). *Fee:* \$190.

June 25-29 Oconomowoc, Wisconsin
Oct. 1-5 Pocono Manor, Pennsylvania
Nov. 12-16 Pacific Grove, California
Dec. 3-7 Clearwater Beach, Florida

For information contact Estes Park Institute, P.O. Box 400, Englewood, CO 80151, Tel. (303) 761-7709.

UNIVERSITY OF NORTHERN COLORADO

June 15-17 Dysfunction in Coping with Learning & Living—The Inn at Estes Park, Colo. (Cosponsored by the School of Special Education & Rehabilitation and the School of Nursing.) *Credit:* AMA Category 1. *Fee:* \$95.

For information contact Cheryl Hiatt, Conference Coordinator, Center for Non-Traditional and Outreach Education, University of Northern Colorado, Greeley, CO 80639, Tel. (303) 351-2891.

BETH ISRAEL HOSPITAL

Aug. 13-18 Aspen Mushroom Conference (Identification of edible, poisonous, and hallucinogenic mushrooms; treatment of mushroom poisoning; microscopy)—Wildwood Inn, Snowmass-at-Aspen, Colo. *Credit:* AMA Category 1.

For information contact Beth Israel Hospital, 1601 Lowell Blvd., Denver, CO 80204, Tel. (303) 825-2190, ext. 359.

**NETWORK FOR CONTINUING
MEDICAL EDUCATION**

Schedule for Upcoming Programs

May 15-28 Hypercalcemia: A Guide to Decision-Making—with Lawrence G. Raisz, M.D., University of Connecticut Health Center, Farmington, Conn.

May 29- June 11 The New Vegetarians: A Health Food Hype?—with Johanna Dwyer, D.Sc., director, Frances Stern Nutrition Center, New England Medical Center Hospital, Boston.

Giant Cell Arteritis: Diagnosis and Treatment—with Robert C. Griggs, M.D., Strong Memorial Hospital, Rochester, N.Y.

Management of Patients on Respirators—with Leonard D. Hudson, M.D., Harborview Medical Center and University of Washington School of Medicine, Seattle.

June 12- July 9 Blood Components and their Application—with Harold A. Oberman, M.D., and John A. Penner, M.D., University of Michigan Medical Center, Ann Arbor. (1 hour AAFP Prescribed credit)

July 10- Aug. 6 The Five Phases of Acute Myocardial Infarction—with J. O'Neal Humphries, M.D., and Bernadine H. Bulkley, M.D., John Hopkins Hospital and School of Medicine, Baltimore (1 hour AAFP Prescribed credit)

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For complete information, consult Official Package Circular.

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Indications: Although the principal indication for cloxacillin sodium is in the treatment of infections due to penicillinase-producing staphylococci, it may be used to initiate therapy in such patients in whom a staphylococcal infection is suspected. (See Important Note below.)

Bacteriologic studies to determine the causative organisms and their sensitivity to cloxacillin sodium should be performed.

Important Note: When it is judged necessary that treatment be initiated before definitive culture and sensitivity results are known, the choice of cloxacillin sodium should take into consideration the fact that it has been shown to be effective only in the treatment of infections caused by pneumococci, Group A beta-hemolytic streptococci, and penicillin G-resistant and penicillin G-sensitive staphylococci. If the bacteriology report later indicates the infection is due to an organism other than a penicillin G-resistant staphylococcus sensitive to cloxacillin sodium, the physician is advised to continue therapy with a drug other than cloxacillin sodium or any other penicillinase-resistant semi-synthetic penicillin.

Recent studies have reported that the percentage of staphylococcal isolates resistant to penicillin G outside the hospital is increasing, approximating the high percentage of resistant staphylococcal isolates found in the hospital. For this reason, it is recommended that a penicillinase-resistant penicillin be used as initial therapy for any suspected staphylococcal infection until culture and sensitivity results are known.

Cloxacillin sodium is a compound that acts through a mechanism similar to that of methicillin against penicillin G-resistant staphylococci. Strains of staphylococci resistant to methicillin have existed in nature and it is known that the number of these strains reported has been increasing. Such strains of staphylococci have been capable of producing serious disease, in some instances resulting in fatality. Because of this, there is concern that widespread use of the penicillinase-resistant penicillins may result in the appearance of an increasing number of staphylococcal strains which are resistant to these penicillins.

Methicillin-resistant strains are almost always resistant to all other penicillinase-resistant penicillins (cross-resistance with cephalosporin derivatives also occurs frequently). Resistance to any penicillinase-resistant penicillin should be interpreted as evidence of clinical resistance to all, in spite of the fact that minor variations in *in vitro* sensitivity may be encountered when more than one penicillinase-resistant penicillin is tested against the same strain of staphylococcus.

Contraindications: A history of a previous hypersensitivity reaction to any of the penicillins is a contraindication.

Warning: Serious and occasionally fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin therapy. Although anaphylaxis is more frequent following parenteral therapy it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with a history of sensitivity to multiple allergens.

There have been well documented reports of individuals with a history of penicillin hypersensitivity reactions who have experienced severe hypersensitivity reactions when treated with a cephalosporin. Before therapy with a penicillin, careful inquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins, and other allergens. If an allergic reaction occurs, the drug should be discontinued and the patient treated with the usual agents, e.g., pressor amines, antihistamines, and corticosteroids.

Safety for use in pregnancy has not been established.

Precautions: The possibility of the occurrence of superinfections with mycotic organisms or other pathogens should be kept in mind when using this compound, as with other antibiotics. If superinfection occurs during therapy, appropriate measures should be taken.

As with any potent drug, periodic assessment of organ system function, including renal, hepatic, and hematopoietic, should be made during long-term therapy.

Adverse Reactions: Gastrointestinal disturbances, such as nausea, epigastric discomfort, flatulence, and loose stools, have been noted by some patients. Mildly elevated SGOT levels (less than 100 units) have been reported in a few patients for whom pretherapeutic determinations were not made. Skin rashes and allergic symptoms, including wheezing and sneezing, have occasionally been encountered. Eosinophilia, with or without overt allergic manifestations, has been noted in some patients during therapy.

Usual Dosage: Adults: 250 mg. q.6h.

Children: 50 mg./Kg./day in equally divided doses q.6h. Children weighing more than 20 Kg. should be given the adult dose. Administer on empty stomach for maximum absorption.

N.B.: INFECTIONS CAUSED BY GROUP A BETA-HEMOLYTIC STREPTOCOCCI SHOULD BE TREATED FOR AT LEAST 10 DAYS TO HELP PREVENT THE OCCURRENCE OF ACUTE RHEUMATIC FEVER OR ACUTE GLOMERULONEPHRITIS.

Supplied: Capsules—250 mg. in bottles of 100, 500 mg. in bottles of 100. Oral Solution—125 mg./5 ml. in 100 ml. and 200 ml. bottles.



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Journal of the Tennessee Medical Association

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Abstract of the Proceedings of the House of Delegates Of the Tennessee Medical Association Knoxville, Tennessee—April 12-15, 1978

The 143rd Annual Meeting of the Tennessee Medical Association was conducted in Knoxville, Tennessee, April 12-15, 1978, with headquarters in the Hyatt Regency Hotel. The House of Delegates met initially at 3:00 P.M., April 12, 1978, with Dr. William H. Edwards, Nashville, presiding as Speaker of the House and Dr. Allen S. Edmonson, Memphis, as Vice-Speaker.

At the opening session, Dr. John H. Burkhart, Knoxville, gave the invocation: "Almighty God, our Father, here we are again for the 143rd time, meeting as the Tennessee Medical Association to learn together, to fellowship together, to work together for the furtherance and improvement of what we sincerely believe to be a high and noble profession, performing a meritorious service to mankind. We seek your approbation and blessing.

"In this particular part of our meeting in which the selected representatives of the physicians of this state are delegated to them to truly represent their interests and the interests of their patients, we are in special need of your direction and your wisdom. None of us can claim 143 years of participation in the affairs of medicine in Tennessee for this is far beyond the time you have allotted to us on this earth. Some have participated longer than others, but whether we have been privileged to serve in this House of Delegates for many of its sessions or are serving today for the first time, give us each, we pray, the humility to acknowledge our fallibility, the courage to stand by our principles, the realization that we speak and act not for ourselves alone, and the determination to do whatever we do for the greater benefit of those whom we seek to serve and for the greater glory of God. Amen."

Report of the Committee on Credentials

Dr. Luther Beazley, Nashville, Committee on Credentials, reported that there was a quorum

present. The Speaker declared the House was in session.

1977 Minutes Approved

The Speaker announced that an abstract of the minutes of the last regular session of the House of Delegates was reproduced in the June, 1977 issue of the *Journal of the Tennessee Medical Association*. It was moved and seconded that the abstracted minutes of the 1977 session of the House of Delegates be approved as published in the June, 1977 issue of the Journal. **The motion was adopted.**

Reference Committees

The Speaker announced the personnel of the reference committees to consider reports, resolutions, amendments, and all matters requiring action by the House of Delegates.

REFERENCE COMMITTEE ON CREDENTIALS

Daniel F. Beals, M.D., *Chairman*, Knoxville
Thomas M. Minor, M.D., Paris
Luther A. Beazley, Jr., M.D., Nashville

REFERENCE COMMITTEE ON AMENDMENTS TO THE CONSTITUTION AND BY-LAWS

John H. Burkhart, M.D., *Chairman*, Knoxville
Hamel B. Eason, M.D., Memphis
Carl T. Stubblefield, M.D., Shelbyville

REFERENCE COMMITTEE A

William B. Crenshaw, M.D., *Chairman*, Nashville
Robert H. Haralson, Jr., M.D., Maryville
Oscar M. McCallum, M.D., Henderson

REFERENCE COMMITTEE B

Duane C. Budd, M.D., *Chairman*, Johnson City
Cullen R. Merritt, II, M.D., Nashville
Fenwick W. Chappell, M.D., Memphis

REFERENCE COMMITTEE C

David P. McCallie, M.D., *Chairman*, Chattanooga
James W. Shore, M.D., Martin
Thomas R. Duncan, M.D., Columbia

REFERENCE COMMITTEE D

James W. Pate, M.D., *Chairman*, Memphis
Robert B. Gilbertson, M.D., Knoxville
Clarence R. Sanders, M.D., Gallatin

REFERENCE COMMITTEE ON OUTSTANDING PHYSICIAN OF THE YEAR AWARD

E. Kent Carter, M.D., *Chairman*, Kingsport
J. Kelley Avery, M.D., Union City
C. Gordon Peerman, Jr., M.D., Nashville

Nominating Committee

As required in the By-Laws, the Board of Trustees, in its January meeting, appointed a Nominating Committee with representatives from each of the three grand divisions of the state. The Speaker announced the personnel of the committee.

MIDDLE TENNESSEE

J. C. Bradshaw, M.D., Lebanon
Bernard S. Davison, M.D., Murfreesboro
Malcolm R. Lewis, M.D., Nashville

EAST TENNESSEE

John H. Burkhart, M.D., Knoxville
David P. McCallie, M.D., Chattanooga
Gilbert A. Rannick, M.D., Johnson City

WEST TENNESSEE

Thomas K. Ballard, M.D., Jackson
Arden J. Butler, M.D., Ripley
Tinnin Martin, Jr., M.D., Memphis

**ELECTION OF
OFFICERS AND COUNCILORS
APRIL 15, 1978**

The report of the Nominating Committee was presented in the second session of the House of Delegates on Saturday, April 15, 1978. Nominees submitted by the committee were voted upon in-

dividually, and in each instance, the Speaker called for additional nominations from the floor. The following were elected:

President-Elect—James W. Hays, M.D., Nashville
Speaker—House of Delegates—Allen S. Edmonson, M.D., Memphis

Vice-Speaker—House of Delegates—Charles E. Allen, M.D., Johnson City

Vice-President (Middle Tennessee) — Edmund W. Benz, M.D., Nashville

Vice-President (East Tennessee)—Bennett Y. Cowan, M.D., Bristol

Vice-President (West Tennessee)—Hobart H. Beale, M.D., Martin

AMA Delegate (East Tennessee)—John H. Burkhart, M.D., Knoxville (January 1, 1979-December 31, 1980)

AMA Alternate Delegate (East Tennessee)—David H. Turner, M.D., Chattanooga (January 1, 1979-December 31, 1980)

AMA Delegate (State-At-Large)—Thomas K. Ballard, M.D., Jackson (January 1, 1979-December 31, 1980)

AMA Alternate Delegate (State-At-Large)—E. Kent Carter, M.D., Kingsport (January 1, 1979-December 31, 1980)

AMA Delegate (Middle Tennessee)—Morse Kochtitzky, M.D., Nashville (April 15, 1978-December 31, 1979)

AMA Alternate Delegate (Middle Tennessee)—Charles B. Thorne, M.D., Nashville (April 15, 1978-December 31, 1979)

TRUSTEES

Middle Tennessee:

Clarence C. Woodcock, Jr., M.D., Nashville (1981)

East Tennessee:

Gilbert A. Rannick, M.D., Johnson City (1981)

West Tennessee:

Tinnin Martin, Jr., M.D., Memphis (1981)

Robert E. Clendenin, Jr., M.D., Union City (1981)

COUNCILORS

First District—Nat E. Hyder, Jr., M.D., Johnson City (1980)

Third District—James R. Royal, M.D., Chattanooga (1980)

Fifth District—Anne U. Bolner, M.D., Fayetteville (1980)

Seventh District—Kenneth Y. Phelps, Sr., M.D., Lewisburg (1980)

Ninth District—Arden J. Butler, Jr., M.D., Ripley

Nominees for the Public Health Council: (Three from West Tennessee, one of whom will be subsequently appointed by the governor.)

Lee Rush, Jr., M.D., Somerville

D. J. Canale, M.D., Memphis

Robert L. Harrington, M.D., Dyersburg

Nominees for the Public Health Council: (Three from East Tennessee, one of whom will be subsequently appointed by the governor.)

William P. Aiken, M.D., Chattanooga

Billy J. Allen, M.D., Chattanooga

Sandford L. Weiler, M.D., Chattanooga

Nominees for the Public Health Council: (Three from Middle Tennessee, one of whom will be subsequently appointed by the governor.)

Thomas B. Zerfoss, Jr., M.D., Nashville

Eric M. Chazen, M.D., Nashville

Charles Sell, M.D., Nashville

THE ABOVE WERE NOMINATED BY THE HOUSE OF DELEGATES

AMENDMENTS TO THE CONSTITUTION AND BY-LAWS

The Speaker reported that there was one amendment to the Constitution and one amendment to the By-Laws to be considered by the House.

AMENDMENT TO THE CONSTITUTION LYING ON THE TABLE CA—NO. 1-77

This amendment was introduced to amend Article IV, Section 3 of the Constitution of the Tennessee Medical Association by deleting from the first sentence the words "Veterans Administration," and in Section 4 by adding at the end of the present section the following wording: "Members who have attained age 70 in the previous calendar year, or age 65 if fully retired, may be elected Veteran Members for the current and subsequent years. Members who are not practicing medicine because of impaired health may be

elected Veteran Members during the first year of disability and thereafter for as long as the disability exists."

Constitutional Amendment No. 1-77 is as follows:

Sec. 3. Associate members shall be commissioned officers in active service of the U.S. Armed Forces and Public Health Service, residing in the state, who are elected to membership by a component society and certified to the Secretary of the State Association as Associate Members. Such physicians may be eligible for active membership, if otherwise qualified.

Sec. 4. Veteran Members are those who, because of age or impaired health, have been elected Veteran Members of their component societies, and who are so certified to the State Association annually by the component societies. **Members who have attained age 70 in the previous calendar year, or age 65 if fully retired, may be elected Veteran Members for the current and subsequent years. Members who are not practicing medicine because of impaired health may be elected Veteran Members during the first year of disability and thereafter for as long as the disability exists.**

ACTION: ADOPTED

AMENDMENT TO THE BY-LAWS BA—NO. 1-78

This amendment was introduced to amend Chapter IX, Section 1 of the By-Laws of the Tennessee Medical Association.

As amended, By-Laws Amendment No. 1-78 is as follows:

Section 1. The annual dues shall be determined by the House of Delegates and shall be levied per capita on the Active Members and Intern and Resident Members of the chartered component societies. The annual dues shall be payable on **or before** January 1 of the year for which they are levied, but any component society reporting dues to the Tennessee Medical Association shall be considered delinquent if payment of dues is not made by **April 30** of the year for which they are levied. The secretary of each component society shall cause to be collected and shall forward to the offices of the State Association the dues for its members **except for those members billed directly by or for the Association.** Any member whose name has not been reported for enrollment and whose dues for the current year have not been remitted to the State Association

on or before **April 30** of the year for which they are levied shall stand delinquent until his name is properly reported and his dues for the current year properly remitted. **Any member who is delinquent at the end of a year may be assessed a reinstatement fee at the discretion of the Board of Trustees, in addition to the regular dues, when reapplying for membership in a subsequent year.** Every Active Member of the Association shall receive the Journal without cost.

ACTION: ADOPTED AS AMENDED

RESOLUTIONS

The reference committees have the option of recommending a resolution for adoption or rejection, for adoption as amended or substituted for referral, or for no action. The resolutions that follow are in the form in which the House of Delegates **adopted, referred, or rejected** them.

RESOLUTION NO. 1-78 **Social Security Tax**

By: MAURY COUNTY MEDICAL SOCIETY

WHEREAS, The Congress of the United States has recently passed a Social Security bill which will approximately quadruple the current Social Security tax on middle income taxpayers but has exempted members of Congress, federal and municipal employees from paying the Social Security tax; and

WHEREAS, The latter feature, in effect, extends the privilege that the members of the bureaucracy now enjoy, furthering the concept of an elite bureaucracy and elected oligarchy and a struggling middle and lower class taxpaying substructure; and

WHEREAS, The Social Security system was originally set up as an unsound Ponzi scheme and the above inequities make it even more unfair; and

WHEREAS, If the Social Security system is to be a fair and equitable system, either every individual in the United States should be subject to paying the tax and enjoying the benefits of it, or it should be a voluntary system. Now, therefore be it

RESOLVED, That the Tennessee Medical Association exert every effort and encourage the American Medical Association likewise to exert

every effort either to make the tax uniform for all citizens of this country or to make it voluntary.

REFERENCE COMMITTEE A—*recommended adoption of Resolution No. 1-78.*

ACTION: ADOPTED

RESOLUTION NO. 2-78 **Unified Membership**

By: CHATTANOOGA AND HAMILTON COUNTY
MEDICAL SOCIETY

WHEREAS, The medical profession is a respected and honored profession; and

WHEREAS, The members of this profession have recognized for many years that the formation of associations has benefited the profession by helping to improve medical care through communication and education of the members; and

WHEREAS, The Tennessee Medical Association and its local constituent societies have greatly increased their activities due to increased responsibilities; and

WHEREAS, The American Medical Association is the only national organization that has the facilities and ability to speak for all of the medical profession on a national level; and

WHEREAS, The medical profession is being viciously attacked more and more frequently at the local, state, and national level by government officials, union, and other organizations in an orchestrated fashion; and

WHEREAS, The medical profession must remain strong and independent of government control. Now, therefore be it

RESOLVED, That the physicians of Tennessee recognize that unity increases strength, and therefore establish unified membership for all its members in local societies, the Tennessee Medical Association and American Medical Association.

REFERENCE COMMITTEE A—*recommended non-adoption of Resolution No. 2-78.*

ACTION: NOT ADOPTED

RESOLUTION NO. 3-78 **IMPACT/AMPAC Dues Billing**

By: CHATTANOOGA AND HAMILTON COUNTY
MEDICAL SOCIETY

WHEREAS, Independent Medicine's Political Action Committee-Tennessee (IMPACT) has

achieved a notable record of success in electing friends of Tennessee medicine to public office at the state and federal level; and

WHEREAS, IMPACT has proven to politicians and governmental bureaucrats alike that the Tennessee physician community is a powerful force which must be reckoned with; and

WHEREAS, Government encroachment in the health care system must be dealt with through increasingly effective means of political action; and

WHEREAS, Joint billing of IMPACT dues of physicians in Tennessee has proven to be a very successful means of increasing participation in the Medical Political Action Committees in the state; and

WHEREAS, The Tennessee Medical Association headquarters office has initiated a new dues billing and collection service for county medical societies who desire to take advantage of the service; and

WHEREAS, A uniform dues billing form is printed by the Tennessee Medical Association and furnished at no cost to all county medical societies. Now, therefore be it

RESOLVED, That beginning in 1979, the Tennessee Medical Association dues billing form will be redesigned for the purpose of including the IMPACT/AMPAC contribution (Voluntary) and listed as part of the total dues amount shown on the form.

REFERENCE COMMITTEE A—*recommended adoption of Resolution No. 3-78 as amended.*

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 4-78

Current Procedural Terminology and Health Claim Form

By: E. KENT CARTER, M.D., CHAIRMAN
COMMITTEE ON GOVERNMENTAL MEDICAL SERVICES

WHEREAS, The Tennessee Medical Association in 1975 officially endorsed the *Current Procedural Terminology* as the coding system for identifying physicians' services; and

WHEREAS, The majority of the private insurance carriers in Tennessee accept the *CPT* on their claim forms; and

WHEREAS, The Tennessee Medical Association was instrumental in having the Medicaid program in Tennessee endorse and use the *CPT* as its coding system; and

WHEREAS, The Medicare intermediary in Tennessee does not endorse the *CPT* but will accept its use in processing Medicare claims. Now, therefore be it

RESOLVED, That physicians be encouraged to give adequate descriptions of services rendered and use the identifying code number for that service if that capability exists in the physician's office, and be it further

RESOLVED, That the members of the Tennessee Medical Association be encouraged to be consistent with all carriers in their coding of services rendered by using the *Current Procedural Terminology* (Fourth Edition), and be it further

RESOLVED, That physicians when filing health claim forms use the AMA-approved universal health claim form.

REFERENCE COMMITTEE C—*recommended adoption of Resolution No. 4-78.*

ACTION: ADOPTED

RESOLUTION NO. 5-78

National Health Care AMA-Sponsored Legislation for National Health Insurance

By: THOMAS G. DORRITY, M.D.

RESOLVED, That the Tennessee Medical Association reaffirms its support of health care delivered through private medical and health care institutions and facilities as opposed to government regulated programs; and be it further

RESOLVED, That the Tennessee Medical Association stresses its opposition to AMA-sponsored bills such as the Comprehensive Health Care Act of 1977 (H.R. 1818) which will expand political control and regulation of health care through appointed bodies and through mandated confiscatory taxation of the nation's employers, both large and small.

REFERENCE COMMITTEE A—*recommended non-adoption of Resolution No. 5-78.*

ACTION: NOT ADOPTED

RESOLUTION NO. 6-78

Opposition to National Health Insurance and National Medicine

By: THOMAS G. DORRITY, M.D.

WHEREAS, It has become increasingly evident that a strong push is being made to achieve some type of national health insurance and national medicine; and

WHEREAS, A number of bills have been introduced into the Congress of the United States to this effect; and

WHEREAS, The private practice of medicine under the free enterprise system has proven beyond doubt to be the best system the world has ever known. Now, therefore be it

RESOLVED, That the Tennessee Medical Association go on record as being opposed to any type of national health insurance or national medicine and strongly in favor of the free enterprise system; and be it further

RESOLVED, That the Tennessee Medical Association's House of Delegates use every means in its power to get the American Medical Association to adopt a similar stand.

REFERENCE COMMITTEE A—*recommended non-adoption of Resolution No. 6-78.*

ACTION: NOT ADOPTED

RESOLUTION NO. 7-78
TMA Program—Disabled Physicians
By: MEMPHIS AND SHELBY COUNTY
MEDICAL SOCIETY

RESOLVED, That the House of Delegates of the Tennessee Medical Association instruct its Board of Trustees to implement a program for the detection and rehabilitation of impaired or disabled physicians.

REFERENCE COMMITTEE B—*recommended adoption of Resolution No. 7-78 as amended.*

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 8-78
Proposed Changes in the American Medical Association's Principles of Medical Ethics
By: THOMAS G. DORRITY, M.D.

WHEREAS, Proposed changes in the American Medical Association's Principles of Medical Ethics

1. May inflict on physicians a "social responsibility to participate in activities intended to improve the health of the community" which action is a delight for collectivist thinkers and a nightmare for those who have read the Declaration of Independence of the United States Constitution (Proposed Principle No. 10); and

2. Engender the possibility of a progressive giveaway of the private practice of medicine to

bureaucratic and other third party pressures by merely urging physicians to "resist restraints—etc., etc." rather than urge that "a physician does not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgment and skill or tend to cause a deterioration of the quality of medical care." (Proposed and Current Principle No. 6); and

3. Has elements of vagueness (Proposed Principle No. 8); and

4. Eliminates the physician's freedom of choice (Proposed Principle No. 5), notwithstanding the fact that moral principle ought to override legalism; and

5. Promotes legal entanglements (Proposed Principle No. 5); and

6. May preclude the possibility for many, many thousands of physicians to dispense medications (Proposed Principle No. 7 as compared with the Current Principle No. 7); and

7. Might encourage physicians to advertise (Proposed Principle No. 5); and

8. Permit the very real possibility of third parties defining what is "fair compensation" for services rendered (Proposed Principle No. 7); and

WHEREAS, The above reasons would indicate that the proposed changes in the Principles of Medical Ethics, which were proposed by the AMA Judicial Council, and are to be submitted for action at the next Annual Convention of the AMA House of Delegates of 1978 for final action, may in fact be a step backward, and not in the best interests of private practicing physicians. Now, therefore be it

RESOLVED, That the Memphis and Shelby County Medical Society express preference for and urge further consideration of retaining the current Principles of Medical Ethics of the American Medical Association; and be it further

RESOLVED, That the Tennessee Medical Association instruct its delegates to the American Medical Association to convey this position to the AMA House of Delegates by resolution.

REFERENCE COMMITTEE C—*recommended non-adoption of Resolution No. 8-78 since much of the material covered in this resolution was also addressed in Resolution No. 21-78.*

ACTION: NOT ADOPTED

RESOLUTION NO. 9-78

Professional Standards Review Organizations

By: THOMAS G. DORRITY, M.D.

WHEREAS, PSRO is a bad law and contrary to the best interests of our patients since it calls upon the private physician to be the patient's adversary by executing HEW directives for standardizing and rationing medical care in order to try to reduce costs; and

WHEREAS, Since based on a false premise, PSRO will ultimately fail to control medical costs, but will try to save money by reducing benefits to the patient, the blame for its failure will be laid at the door of the physicians who participate; and

WHEREAS, Recent HEW regulations promulgating more national types of norms make it even more obvious that there will be no real local control by participating physicians, and that those serving on PSRO or in delegated hospitals will be forced to follow HEW orders, being in truth mere agents of HEW; and

WHEREAS, The Association of American Physicians and Surgeons stands ready to reopen the AAPS lawsuit before the three-judge court, as soon as an actual incident occurs in which a PSRO can be proven to interfere with quality medical care; and

WHEREAS, PSRO law itself states it is voluntary, it is exceptionally vulnerable to non-cooperation by medical staff physicians and medical staffs. Now, therefore be it

RESOLVED, That we

1. Encourage our medical staffs to continue to perform true peer review of doctors by doctors in accordance with our own rules.

2. Encourage and support our medical staffs in joining with other medical staffs to present a united front in opposition to PSRO interference with quality medical care.

REFERENCE COMMITTEE C—*recommended non-adoption of Resolution No. 9-78*

ACTION: **ADOPTED AS AMENDED**

RESOLUTION NO. 10-78

Voluntary Health Care Cost Containment

By: AD HOC COMMITTEE ON VOLUNTARY COST CONTAINMENT

A. ROY TYRER, JR., M.D., CHAIRMAN

WHEREAS, The escalation of health care costs has become a national concern of all responsible citizens; and

WHEREAS, The American Medical Association, American Hospital Association and the Federation of American Hospitals conjointly have embarked on a voluntary health care cost containment effort with emphasis on hospital-related expenditures; and

WHEREAS, Physician-made decisions determine if hospitalization is necessary and what medical services are to be provided a patient; and

WHEREAS, There has been a significant increase in the proportion of hospital expenditures that relate to physician-determined ancillary medical services in comparison to expenditures for room and nursing services. Now, therefore be it

RESOLVED, That all physicians, including physicians in training, become knowledgeable in all aspects of patient-related medical expenses, including hospital charges of both a service and professional nature; and be it further

RESOLVED, That physicians be cost conscious and exercise discretion consistent with good medical care in determining the medical necessity for hospitalization and the specific treatment, tests, and ancillary medical services to be provided a patient; and be it further

RESOLVED, That medical staffs in cooperation with hospital administrators embark now upon a concerted effort to educate physicians, including house staff officers, on all aspects of hospital charges, including specific medical tests, procedures, and all ancillary services; and be it further

RESOLVED, That medical educators be urged to include similar education for future physicians in the required medical school curriculum, and be it further

RESOLVED, That all physicians and medical staffs join with hospital administrators and hospital governing boards throughout Tennessee in a conjoint and across-the-board effort to voluntarily contain and control the escalation of health care costs, individually and collectively, to the greatest extent possible consistent with good medical care; and be it further

RESOLVED, That all physicians, practicing solo or in groups, independently or in professional association, review their professional charges and operating overhead with the objective of providing quality medical care at optimum reasonable patient cost through appropriateness of fees and efficient office management, thus favorably moderating the rate of escalation of health care costs; and be it further

RESOLVED, That a copy of this resolution

be forwarded promptly to the chief of staff of each hospital in Tennessee and to the president of each county medical society, to the chairman of the governing board of each hospital in Tennessee, the chief executive officer of each hospital in Tennessee, and to each medical specialty society in Tennessee; and be it further

RESOLVED, That a resolution of similar nature, national in scope, be introduced by the TMA delegates to the American Medical Association.

REFERENCE COMMITTEE C—*recommended adoption of Resolution No. 10-78 as amended.*

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 11-78
Joint Practice Supervision

By: BRADLEY COUNTY MEDICAL SOCIETY

WHEREAS, Since the enactment of the Primary Health Care Law, numerous public and private "Joint Practice Settings" are in operation and many more are in the planning stage; and

WHEREAS, The nurse practitioner in many instances has the supervisor-physician on the premises one day weekly and practices alone the rest of the week; and

WHEREAS, Most of these clinics are in areas where many physician providers are located; and

WHEREAS, No physician group has any control over the "Joint Practice" protocol; and

WHEREAS, Efforts are being made to legalize prescription writing by the nurse practitioner. Now, therefore be it

RESOLVED, That the Tennessee Medical Association's House of Delegates strongly recommends "on site" supervision by the physician in the joint practice setting; and be it further

RESOLVED, That the protocols be subject to approval by the Board of Medical Examiners, and that a copy of this resolution be sent to the state Primary Health Care Board, the Primary Health Care Division of the Public Health Department, both Houses of the State Legislature, and the Public Health Council.

REFERENCE COMMITTEE B—*recommended adoption of Resolution No. 11-78 as amended.*

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 12-78
PSRO Requirements and Regulations

By: KNOXVILLE ACADEMY OF MEDICINE

WHEREAS, We believe PSRO to be ineffec-

tive as a measure to improve the quality of medical care, and ineffective as an instrument in controlling the cost of medical care; and

WHEREAS, We believe that present PSRO requirements contribute significantly to the rising costs of health care; and

WHEREAS, We are concerned with preservation of confidentiality of patients' records. Now, therefore be it

RESOLVED, That the Tennessee Medical Association go on record as opposing the extension of current PSRO practices and regulations to outpatient care in physicians' offices, and opposing any intrusion of agents of the federal government into the offices and records of private physicians.

REFERENCE COMMITTEE C—*recommended adoption of Resolution No. 12-78 as amended.*

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 13-78
Mandatory Acceptance of Assignment for Insurance

By: KNOXVILLE ACADEMY OF MEDICINE

RESOLVED, That the Tennessee Medical Association oppose the principle of mandatory acceptance of assignment as a requirement for reimbursement for the care of patients who are recipients of combined Medicare-Medicaid benefits; and be it further

RESOLVED, That the Tennessee Medical Association vigorously oppose any future effort to include mandatory acceptance of assignment as a condition for reimbursement from any government or private source.

REFERENCE COMMITTEE A—*recommended adoption of Resolution No. 13-78.*

ACTION: ADOPTED

RESOLUTION NO. 14-78
National Health Insurance

By: KNOXVILLE ACADEMY OF MEDICINE

RESOLVED, That the Tennessee Medical Association reaffirm its stand in opposition to universal compulsory national health insurance which is totally funded and regulated by the federal government.

REFERENCE COMMITTEE A—*recommended adoption of Resolution No. 14-78.*

ACTION: ADOPTED

RESOLUTION NO. 15-78
Opposition of a National Academy of Medicine

By: NASHVILLE ACADEMY OF MEDICINE

WHEREAS, Legislation has been introduced into the 95th Congress to establish a National Academy of Medicine; and

WHEREAS, This legislation was introduced by Congressman Clifford Allen to create a federal medical school to graduate 1,600 physicians each year; and

WHEREAS, Experience has shown that government operated enterprise is usually far more costly than similar enterprise carried out in the private sector; and

WHEREAS, The medical profession has stressed medical education as a priority for many years; and

WHEREAS, Through the combined efforts of the medical profession, the American Medical Association, the American Association of Medical Colleges, and various accrediting bodies, the number of graduating M.D.s in the United States has increased from approximately 8,000 in 1960 to 13,607 in 1977, and the total number of medical schools in the United States from 89 in 1973 to 116 in 1977; and

WHEREAS, Current U.S. Public Health Service programs, such as the National Health Service Corps, offer scholarships to medical students electing to practice in medically underserved areas; and

WHEREAS, A government medical school large enough to graduate 1,600 physicians per year would experience unprecedented administrative problems and require equally unprecedented clinical training resources. Now, therefore be it

RESOLVED, That the Tennessee Medical Association go on record as opposing H.R. 11452 establishing a National Academy of Medicine and urge Congress to support the efforts of the medical profession to guarantee the provision of accessible high quality medical and health care to our communities and population.

REFERENCE COMMITTEE A—*recommended adoption of Resolution No. 15-78 as amended.*

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 16-78
Physician Representation on HSA Boards

By: NASHVILLE ACADEMY OF MEDICINE

WHEREAS, The National Health Planning and Resources Development Act of 1974 (Public

Law 93-641) has established a broad system of health planning at the local, state, and national levels; and

WHEREAS, Local authority for health care and facilities planning is vested in a health systems agency (HSA) serving a specific geographical area as designated by the governor of each state, subject to approval by the secretary of Health, Education and Welfare; and

WHEREAS, Each HSA is responsible for certificate of need review at the local level; and

WHEREAS, Each HSA is ultimately responsible for all government health care dollars spent within its designated "health service area"; and

WHEREAS, P.L. 93-641 specifically mandates that the governing body (board) of the HSA be composed of "a majority (but not more than 60 per centum of the members)" of health care consumers and that the remainder of the board be composed of both "direct" and "indirect" providers of health care, thus further limiting the number of physicians, dentists, and other health care professionals on each HSA board. Now, therefore be it

RESOLVED, That the Tennessee Medical Association House of Delegates go on record as supporting the American Medical Association in its efforts to amend Public Law 93-641 providing for adequate physician representation on each HSA board, and so instruct the Tennessee delegation to the American Medical Association's House of Delegates.

REFERENCE COMMITTEE A—*recommended adoption of Resolution No. 16-78.*

ACTION: ADOPTED

RESOLUTION NO. 17-78
Promulgation of Rules and Regulations By the Tennessee Board of Medical Examiners
Re: Certification of Physician's Assistants

By: NASHVILLE ACADEMY OF MEDICINE

WHEREAS, The Tennessee Medical Association sponsored legislation in 1973 providing for certification of physician's assistants in Tennessee; and

WHEREAS, Such legislation was amended at the insistence of the Tennessee Optometric Association to prohibit the utilization of a physician's assistant by an ophthalmologist, thus forcing TMA to oppose passage of this legislation; and

WHEREAS, The Tennessee Academy of Physician's Assistants introduced certification legislation in 1978 including the so-called "Duffy

Amendment," prohibiting the use of a physician's assistant by an ophthalmologist and unnecessarily restricting eligibility for certification; and

WHEREAS, The physician's assistant is recognized by the AMA and the TMA as a physician extender and can be effectively utilized in a joint practice setting pursuant to T.C.A. 63-608; and

WHEREAS, The Tennessee Board of Medical Examiners had been granted by the 90th Tennessee General Assembly the prerogative and authority to promulgate rules and regulations. Now, therefore be it

RESOLVED, That the Tennessee Medical Association urge the Tennessee Board of Medical Examiners to promulgate appropriate rules and regulations pursuant to T.C.A. 63-608 providing for the certification of physician's assistants under the auspices of the Board; and be it further

RESOLVED, That the Tennessee Medical Association offer to the Tennessee Board of Medical Examiners its assistance and cooperation in the formulation of such rules and regulations.

REFERENCE COMMITTEE B—*recommended adoption of Resolution No. 17-78.*

ACTION: **ADOPTED**

RESOLUTION NO. 18-78

Promulgation of Rules and Regulations By the Tennessee Board of Medical Examiners Re: Joint Practice, T.C.A. 63-608

By: NASHVILLE ACADEMY OF MEDICINE

WHEREAS, In 1973 the "practice of medicine" as defined in T.C.A. 63-608 was expanded to allow medical services to be rendered by a physician's trained assistant, registered nurse, or licensed practical nurse "under the supervision, control, and responsibility of a licensed physician"; and

WHEREAS, Since the enactment of this amendment expanding the definition of the "practice of medicine," Tennessee has experienced confusion due to the varying legal and professional interpretations of the amendment; and

WHEREAS, Without definitive interpretation of this amendment to T.C.A. 63-608, the "Medical Practice Act," by the Tennessee Board of Medical Examiners, this confusion will continue to exist compromising high quality medical care in Tennessee; and

WHEREAS, The Tennessee Medical Association's House of Delegates has previously adopted Resolutions 5-75 and 5-76 supporting the delegation of authority to certain ancillary

personnel under certain conditions; and

WHEREAS, The Tennessee Board of Medical Examiners now has the prerogative and authority to promulgate rules and regulations pursuant to recently passed legislation. Now, therefore be it

RESOLVED, That the Tennessee Medical Association urge the Tennessee Board of Medical Examiners to promulgate appropriate rules and regulations providing for physician supervision of the medical services rendered by physician-extenders in joint practice settings; and be it further

RESOLVED, That the Tennessee Medical Association offer to the Tennessee Board of Medical Examiners its assistance and cooperation in the formulation of such rules and regulations.

REFERENCE COMMITTEE B—*recommended adoption of Resolution No. 18-78 as amended.*

ACTION: **ADOPTED AS AMENDED**

RESOLUTION NO. 19-78

Medical Examination Before Marriage

By: JOHN L. SAWYERS, M.D., PRESIDENT
NASHVILLE ACADEMY OF MEDICINE

WHEREAS, Current Tennessee law, T.C.A. Title 36, Chapter 5, entitled "Medical Examination Before Marriage" was enacted in 1939; and

WHEREAS, This law provides the mechanism for physician certificate prior to marriage including physical examination and certain serological tests; and

WHEREAS, This law has not reflected recent developments in medical technology including refinements in serological testing concerning venereal diseases making actual "inspection of the body" unnecessary. Now, therefore be it

RESOLVED, That the Tennessee Medical Association urge the Tennessee Department of Public Health to update T.C.A. 36-5 concerning "Medical Examination Before Marriage"; and be it further

RESOLVED, That the Tennessee Department of Public Health be asked to work with the Tennessee Medical Association and all appropriate specialty societies in appropriately revising this statute.

REFERENCE COMMITTEE A—*recommended adoption of Resolution No. 19-78 as amended.*

ACTION: **ADOPTED AS AMENDED**

RESOLUTION NO. 20-78

Required Use of Safety Belt Restraint Systems

By: LUTHER A. BEAZLEY, JR., M.D.

WHEREAS, The highway epidemic of traffic accidents kills thousands of people each year, with 1,146 vehicle occupant fatalities and approximately 46,000 injuries in Tennessee in 1976; and

WHEREAS, The proper use of safety belt systems is highly effective in reducing the number of fatalities and injuries suffered by vehicle occupants; and

WHEREAS, Over 90 percent of all registered automobiles are equipped with safety belt systems but only about 20 percent of all automobile occupants currently use these safety belt systems; and

WHEREAS, Research studies and experience indicate that increasing safety belt system usage to 60 percent in Tennessee would save approximately 300 more lives a year and prevent 24,000 injuries; and

WHEREAS, It is estimated that increasing safety belt system usage in Tennessee to 60 percent would save Tennessee taxpayers over 231 million dollars a year; and

WHEREAS, Twenty-three countries have reduced the number of vehicle occupant deaths and injuries through enactment of laws requiring the use of safety belt systems by vehicle occupants; and

WHEREAS, Tennessee has led the nation in fighting the highway accident epidemic as the leading cause of death of children under four years of age through enactment of one of the nation's first child passenger protection laws; and

WHEREAS, This law requires that children under four years of age be protected through the use of a child restraint system but does not provide protection for older children and adults. Now, therefore be it

RESOLVED, That the Tennessee General Assembly should act immediately to protect *all* vehicle occupants from preventable death and injury by enactment of additional legislation requiring vehicle occupants four years of age and older to use safety belt restraint systems.

REFERENCE COMMITTEE A—*recommended adoption of Resolution No. 20-78.*

ACTION: NOT ADOPTED

RESOLUTION NO. 21-78

Opposition of Changes in AMA Principles of Medical Ethics as Outlined in *American Medical News*, January 16, 1978

By: THOMAS G. DORRITY

WHEREAS, The AMA Principles of Medical Ethics long have been held by most reputable physicians as the acceptable outline to the practice of medicine; and

WHEREAS, The proposed changes in this Code of Ethics as outlined in the above stated newspaper are such that there would be no conflict with any federal interest in the practice of medicine, including NHI; and

WHEREAS, These changes, particularly in Articles VI and X, would change the primary obligations of the physician from those to the patient to obligations to society in general; and

WHEREAS, This is total reversal of our presently stated obligations. Now, therefore be it

RESOLVED, That the Tennessee Medical Association in regular session, this April 12, 1978, states its opposition to the proposed changes in the AMA Principles of Medical Ethics; and be it further

RESOLVED, That the Judicial Council of the Tennessee Medical Association be asked to review the Principles of Medical Ethics of the AMA and bring to this House any proposal for improvement considered appropriate; and be it further

RESOLVED, That a copy of this resolution be forwarded to the President of the American Medical Association.

REFERENCE COMMITTEE C—*recommended adoption of Resolution No. 21-78 as amended.*

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 22-78

Costs

By: THOMAS G. DORRITY, M.D.

WHEREAS, The medical profession has been frequently attacked as the cause of increased costs in medical care; and

WHEREAS, The federal government by debauching our currency, by fiscal irresponsibility, and by the thievery of runaway inflation, is causing the prices of all goods and services to skyrocket. Now, therefore be it

RESOLVED, That the House of Delegates of the Tennessee Medical Association seek to correct the public misunderstanding by documenting and publicizing the real causes of rising costs, namely:

1. Governmental deficit spending and resultant inflation;
2. Governmental over-regulation;
3. Increased demands and expectations, including (a) Irresponsible pressures for first dollar coverage, (b) Governmental interference in the marketplace;
4. Increased costs of all services and products which physicians and hospitals must purchase on the open market;
5. Advances in diagnostic and therapeutic medicine;

6. Patient insistence on hospitalization for procedures which could be performed on an outpatient basis;
7. Inappropriate overutilization of emergency services.

REFERENCE COMMITTEE C—*recommended adoption of Resolution No. 22-78 as amended.*

ACTION: ADOPTED AS AMENDED AND REFERRED TO THE BOARD OF TRUSTEES FOR IMPLEMENTATION

COMMENDATION RESOLUTION

Tom E. Nesbitt, M.D.

By: NASHVILLE ACADEMY OF MEDICINE

WHEREAS, Tom E. Nesbitt, M.D., has achieved a highly distinguished record of leadership and service to organized medicine in the past twenty years; and

WHEREAS, He has served as secretary-treasurer of the Nashville Academy of Medicine, President of the Tennessee Medical Association, Speaker and Vice-Speaker of the House of Delegates of the Tennessee Medical Association, and has been a member of the TMA House for the past seventeen years; and

WHEREAS, He has served as Speaker and Vice-Speaker of the House of Delegates of the American Medical Association, and was a member of the AMA House for ten years; and

WHEREAS, On June 22, 1977 in San Francisco he was enthusiastically and unanimously acclaimed President-Elect of the American Medical Association, the eighth physician from Nashville

and Tennessee to attain this distinction; and

WHEREAS, On June 21, 1978 in St. Louis he will be inaugurated as the 133rd President of the American Medical Association, the highest office in American medicine. Now, therefore be it

RESOLVED, That this House of Delegates pay tribute to this outstanding colleague for his vast contributions in behalf of the medical profession and the public, and extend to him our best wishes and full support throughout his tenure as President of the American Medical Association; and be it further

RESOLVED, That the Board of Trustees of the Tennessee Medical Association present to Tom E. Nesbitt, M.D., a permanently framed copy of this resolution to serve as a constant reminder of our sincere appreciation and admiration.

ACTION: ADOPTED

TENNESSEE'S OUTSTANDING PHYSICIAN OF THE YEAR

G. Baker Hubbard, M.D.

Each year the Tennessee Medical Association has the privilege of honoring one of its own as the Outstanding Physician of the Year. No greater honor can be bestowed upon any individual than being recognized by one's peers for outstanding achievement. This year, the House of Delegates considered three physicians who, each in his own right, are deserving of this special recognition; however, only one could be chosen and we pay tribute to him.

G. Baker Hubbard, M.D., is one of the most loved and respected physicians in the entire state of Tennessee and throughout the southeast. His name is synonymous with organized medicine in that he has been one of the most active physicians serving various associations for the past twenty-five years. He is a Past-President of the Tennessee Medical Association as well as a past member of the Board of Trustees. He currently holds the office of vice president of the Southern Medical Association and has been a councilor representing the state of Tennessee and the Southern Medical Association for the past several years.

Dr. Hubbard is a native of Princeton, Kentucky

and received his M.D. degree in 1937 from Vanderbilt University School of Medicine. Since 1946 he has been in the private practice of general surgery in Jackson, Tennessee. In 1950 he and four other physicians in the Jackson area organized and began one of the first multispecialty clinics in the state of Tennessee. Known as the Jackson Clinic, this group of our physicians has now expanded into twenty-seven and has representatives of all of the major medical specialties.

He is a former chief of staff of the Jackson-Madison County General Hospital, a former member of the board of directors of the Tennessee Hospital Service Association and a member of the board of directors of Crestline Finance Corporation. Dr. Hubbard holds membership in numerous medical organizations, and his leadership and dedicated service to all of these is truly remarkable.

Dr. Hubbard is married to the former Elizabeth Beesley of Nashville, and they have four children.

Dr. Hubbard was nominated for this award by his own county medical society, the Consolidated Medical Assembly of West Tennessee.

DISTINGUISHED SERVICE AWARDS

The Distinguished Service Award is presented annually by the Board of Trustees of the Tennessee Medical Association to physician members who have made eminent contributions to the public welfare or to the advancement of medical science. At the 143rd Annual Meeting of the TMA on April 14, the Chairman of the Board of Trustees announced that there were three recipients of this award in 1978. The following are those who received the award:

I. Lee Arnold, M.D., Chattanooga, was born in Owenton, Kentucky, September 20, 1918. He received his M.D. degree from the University of Louisville College of Medicine in 1943. Following a residency in ophthalmology in Memphis, Dr. Arnold established his practice in Chattanooga in 1948.

Dr. Arnold's professional and community leadership roles are multifold. He has served as president of the Chattanooga-Hamilton County Medical Society as well as president of the Tennessee Academy of Ophthalmology. He has served on virtually every committee of his local society and numerous TMA committees. He is chairman of the TMA Committee on Medicine and Religion, a position he has held since 1964, and was instrumental in establishing the annual Medicine and Religion Breakfast held on Saturday morning during our annual conventions.

As president of the Chattanooga Ophthalmology Foundation since its inception, Dr. Arnold was instrumental in developing the Eye Institute which is currently under construction in Chattanooga.

For these and many other accomplishments, the Board of Trustees was pleased to present this award to Dr. Arnold.

Albert W. Diddle, M.D., Knoxville, was born in Hamilton, Missouri, July 1, 1909. He was awarded his M.D. degree in 1936 from Yale University Medical College, and following his residency training in obstetrics and gynecology plus military service, Dr. Diddle came to Knoxville to begin his private practice in 1948.

He has successfully combined a career in teaching and private practice. Dr. Diddle taught OB/GYN at Southwestern in Dallas, sociology at the University of Tennessee, and was chairman and professor of the Department of Obstetrics and Gynecology at UT Memorial Hospital. He has authored some 130 scientific articles and authored the chapter on surgical and medical complications in gynecology in *BENSON'S TEXTBOOK*.

Dr. Diddle's thirst for knowledge and his desire to impart and share this knowledge has resulted in his being responsible for the training of sixteen OB/GYN residents who were Board eligible, all of whom have successfully passed their boards, and nine are now in practice in Knoxville. When Dr. Diddle

retired as chairman and professor of the Department of OB/GYN at UT Memorial Hospital in 1972, his former students honored him at a special dinner in grateful appreciation for his years of service as a teacher, pioneer in cancer screening programs and development of treatment facilities, and his exemplary devotion to the medical profession.

The Board of Trustees was proud to present this award to Dr. Diddle.

Oscar M. McCallum, M.D., was born on November 28, 1926, in Henderson, Tennessee where he is now a family practitioner. Dr. McCallum was educated at the University of Tennessee in Knoxville, and following military service, received his M.D. degree from UT in 1951. He began his family practice in Henderson in 1954.

Dr. McCallum has served as president of the Consolidated Medical Assembly of West Tennessee and a member of the TMA House of Delegates for the past seventeen years. He has served with distinction on numerous TMA committees including two separate terms on the TMA Board of Trustees.

His contributions have not been limited to his local and state medical associations. Dr. McCallum has been instrumental in seeing the development and growth of the Tennessee Academy of Family Physicians during the past eighteen years. In addition to his committee activities, Dr. McCallum currently serves as a Tennessee delegate to the American Academy of Family Physicians. He has represented organized medicine on several important committees, councils and commissions of state government, including the Medicaid Medical Advisory Committee and the Committee on Administration of the Hill-Burton program. He has also found time to be an active and productive member of community activities. A part-time politician, Dr. McCallum has been a member of the Chester County Court since 1972 and a member of the Chester County Board of Health for over twenty years. To show the community's feeling toward Dr. McCallum, he recently was named "Mr. Henderson of 1978" by the Henderson Civitan Club. In addition to serving various civic and voluntary health organizations, he is a member of the Medical Advisory Committee of Freed-Hardeman College and Jackson State College.

Dr. McCallum's interest in the development of family practice is reflected in his being instrumental in the establishment of a Family Practice Residency Program at the Jackson-Madison County General Hospital. He currently represents physicians on his local Health Systems Agency as well as the State Health Coordinating Council.

Dr. McCallum has certainly won the admiration of this Association and is most deserving of the Distinguished Service Award.

COMMUNITY SERVICE AWARD

Mrs. Frances Meeker, a feature writer of the NASHVILLE BANNER, has for several years been its chief medical reporter and has covered several of TMA's scientific meetings and House of Delegates sessions.

Mrs. Meeker is an advocate of both the medical profession and the public which she serves. When there is a medical story to be told, she is there reporting the event in a timely, accurate manner and in compliance with the highest standards of professional ethics. Mrs. Meeker is this year's recipient of the Nashville Academy of Medicine's communication award for her outstanding achievement in medical news reporting. Not only is she an excellent writer, but she also serves her community in many capacities. She is a member of the East End United Methodist Church in Nashville and regularly teaches an adult Sunday school class there. In addition, she is extremely active in the neighborhood outreach program. For eight years she was the administrative assistant to the Bishop of the Tennessee Annual Conference.

It is an honor for the medical profession to have such a "friend in the press," and it was a pleasure for the Tennessee Medical Association to present the Community Service Award to Mrs. Meeker.

REPORTS OF OFFICERS

Report of the President

DAVID H. TURNER, M.D.

Dr. Turner abstracted his report and gave the following highlights:

It has been a privilege and an honor for me to have served as your President this past year. I have striven to carry out my duties and hope that my efforts have been satisfactory.

I think that it has been a good year for the Tennessee Medical Association. Many have worked hard and contributed to the accomplishments of this year. I want to thank the members of the Board of Trustees, the Judicial Council, the committees of the Association, the editorial staff of our Journal, the members of the IMPACT board, and especially the headquarters staff for their continued efforts and contributions. It is through the dedicated efforts of many working together that this Tennessee Medical Association continues to grow and provide more and better service to our profession and the people of Tennessee.

I would like to make a special commendation to Mr. Hadley Williams for the exemplary way in which he has assumed the duties of Executive Director. His capabilities have provided a smooth transition and a continued efficient operation of the headquarters.

In contradistinction to recent previous years, there have been no crises this year. The State Volunteer Mutual Insurance Company, our own Association's response to the medical liability insurance crisis, began issuing policies in April, 1976 and is now well founded. It is operated by a dedicated board of directors who deserve our acknowledgement and appreciation.

The malpractice review board system, established as a result of the medical liability crisis, is becoming well established. Changes are being made in the operation of this system through legislative measures which, hopefully, will make it more efficient and effective.

The Tennessee Medical Association has been well represented on Capitol Hill during this session of the General Assembly by capable staff members: Bill Williams, Don Alexander, and Dave Morison. In addition to the daily presence of a member of our Association as the "Doctor of the Day," the Legislative Committee of TMA has provided a member each Wednesday to speak, when asked, before committee hearings concerning legislation related to medicine. This new function has proven beneficial.

The Tennessee Foundation for Medical Care has continued to operate the professional standards review organization mandated by federal legislation. Whether or not its functions will prove to be beneficial to the quality of medical care delivered and to the inhibition of cost increases remains to be seen. This organization is attempting to do a good and professional job under difficult circumstances.

A new organization, the Tennessee Physicians Protective Association, has been formed by members of this Association, but independent of the Association. This organization is soliciting members to give support to those physician members who countersue individuals who have improperly sued them for medical activities. It is the belief of the board of directors of the Tennessee Physicians Protective Association that this is another mechanism that will help to deter unnecessary medical liability suits. I would encourage each of you to become a member of this organization.

During the past several years, the federal government has greatly increased its activities in the

influence and control of the practice of medicine. Probably the most dangerous and detrimental to the private practice of medicine was the establishment of health systems agencies by the Health Planning and Facility Act. We, as practicing physicians, must continue to make our voices heard in these agencies. There is an increasing effort to dilute physician influence by enlarging the boards of these agencies with special consumer interests.

National health insurance, about which we have been concerned for many years, may be an issue whose time has come and gone. There appear to be many reasons that this issue is receiving little attention by the U.S. Congress at this time, not the least of which is the recognition of the great cost involved. Members of Congress say that there is no pressing need for a national health insurance plan, and those who were pressing so hard for it are no longer doing so. The administration has said that it will soon introduce a new NHI bill, but many consider this to be only a political gesture with almost no chance of passing Congress. In spite of this we, as physicians, must continue to keep ourselves informed and actively support political candidates who will help us oppose socialized medicine. We would be foolish to assume that those who would have a nationalized health service, totally controlled by the federal government, would ever give up their organized plans. We must remain alert, we must remain active, and we must be willing to sacrifice our time and our resources if we are to retain the freedom that we enjoy—the freedom that has made our profession great and our nation the greatest.

REFERENCE COMMITTEE C—*commended the President of the Tennessee Medical Association for his year of dedicated service to the Association and thanked him for his excellent report. The reference committee recommended that the report be filed.*

Report of the Board of Trustees

W. DAVID DUNAVANT, M.D., *Chairman*

The Chairman abstracted his report and gave the following highlights:

The Board of Trustees of the Tennessee Medical Association is composed of 14 physicians—nine elected Trustees plus the President, Presi-

dent-Elect, Immediate Past President, Speaker of the House of Delegates, and Vice-Speaker of the House of Delegates. This is a dedicated group whose duty is to manage the affairs of this Association between sessions of the House of Delegates. Your Board of Trustees has met six times since the last House session. The Executive Committee of the Board met on six other occasions.

The Board and Executive Committee acted upon 190 separate items of business on behalf of the Association during the past 12 months. This represents an increase of 50% over items of business acted upon in 1976. Many additional items and matters were considered and disposed of by telephone conferences and by mail when possible. Matters pertaining to general administration, finances, membership, Annual Meeting, AMA conventions, and Journal publication will all be reported on in detail by various officers and committee chairmen. The Board has assumed the responsibility for interim policy decisions in each of these areas as required by the Constitution and By-Laws. The demands upon each member of the Board, therefore, are much greater than perceived by the average member. A wide variety of subjects must be dealt with annually, many of which frequently require hours of preparation and study. The problems facing medicine in Tennessee demand such attention and the Association is fortunate to have the dedication and knowledge that is represented on the Board.

The affairs of the Board are administered through the Executive Committee and the Committees on Finance, Publications, Medical Licensure, Exhibits, Confidentiality, Long Range Planning, Travel, Voluntary Cost Containment, and Utilization of Medicaid Data. The Board must keep abreast of new activities on major health issues and considers and recommends programs and procedures to meet TMA's objectives. The Board is responsible for the fiscal soundness of the Association and maintains control of all financial affairs.

The following are abstracted highlights of some of the more important items of business acted upon by the Board and its Executive Committee during the past 12 months.

Second Quarter Board Meeting—April 16, 1977
The Board:

—Acted upon Resolution No. 23 pertaining to the TMA/TNA Joint Practice Committee following the directives of the House.

- Named Dr. William O. Miller to carry out requirements of Resolution No. 25 pertaining to the Committee on Long Term Health Care.
- Finalized appointments to standing and special committees.
- Approved a loan not to exceed \$25,000 during 1977 to the TMA Student Education Fund.

Executive Committee Meeting—May 26, 1977

The Committee:

- Approved nominations for TMA representatives to serve on the Tennessee Medicaid Pharmacy and Therapeutics Committee, Medicaid Medical Advisory Committee and Emergency Medical Services Advisory Council.
- Approved TMA staff support for Judicial Council when needed for investigating complaints.
- Endorsed a study by the UT Transportation Center regarding auto accidents on narrow bridges within the state.
- Received a report relative to problems with the Medicaid fiscal intermediary.
- Endorsed a workshop for medical assistants.
- Approved an appropriation to assist two resident and intern members to attend the Resident and Intern Business Meeting during the AMA Convention.
- Approved recommendations from Travel Committee regarding future tours.
- Met with representatives of the Tennessee Primary Health Care Association to discuss that organization's purposes and plans.

Third Quarter Board Meeting—July 10, 1977

The Board:

- Appointed an ad hoc committee to study problems related to medical malpractice review board operation.
- Established TMA policy regarding laetrile and TMA's position for Legislative Committee hearings.
- Declined an invitation from the Kentucky Nurses Association regarding sponsorship of a two-state conference on joint practice.
- Approved an appropriation to permit the Editor of the Journal to attend the AMA meeting in December.
- Accepted a report from the Executive Director regarding a new records and dues billing system and approved new policy regarding the billing

and collection of dues for county medical societies who desire the new service.

- Nominated physicians to serve on the Tennessee Board of Nursing and Air Pollution Control Board.
- Accepted a report from the TMA-EMS Committee and endorsed the committee's efforts in supporting legislation.
- Approved the first half year financial statement.
- Accepted Dr. Tom E. Nesbitt's resignation as an AMA delegate and appointed the Middle Tennessee alternate delegate, Dr. Morse Kochtitzky, to sit as a TMA delegate to the AMA at the December AMA Clinical Meeting.
- Requested the TMA Insurance Committee to investigate a complaint regarding the Investment Retirement Trust.
- Received a report from Dr. Morse Kochtitzky regarding the British National Health Service following his visit to England.

Executive Committee Meeting—August 24, 1977

The Committee:

- Directed that a response be made to a letter from the National Center for Disease Control regarding dissemination of information from the Center.
- Received a report from the Legislative Committee regarding congressional hearings on national health insurance and health systems agencies.
- Made nominations to the Tennessee Hospital Licensing Board and the Board of Hearing Aid Dispensers.
- Adopted policy in opposition to plans by state Center for Health Statistics to include a questionnaire with the 1978 license renewal application.
- Referred communication from Tennessee Electrologists Society to the Tennessee Society of Dermatologists.
- Recommended ten physicians to assist AMA in their efforts regarding television effects on children.
- Received a letter from the Knoxville Academy of Medicine regarding physician reimbursement under Medicare.
- Approved sending Dr. Morse Kochtitzky's report on the British National Health Service to all members of the Tennessee congressional delegation.

Fourth Quarter Board Meeting—October 23, 1977

The Board:

- Approved recommendations from TMA Legislative Committee.
- Received a report from the Ad Hoc Committee on Medical Malpractice Review Board and approved recommendations from the committee.
- Received a report regarding the 15th annual TMA-sponsored Rural Health Conference held in Cookeville, Oct. 5, 1977.
- Heard Dr. Tom Nesbitt, President-Elect of the American Medical Association, report regarding national efforts to secure physician data by the federal government.
- Heard Mrs. Barbara Coles, president of the TMA Auxiliary, report on plans for the 1978 Annual Meeting in Knoxville.
- Approved purchase of accidental death insurance for members of the Board.
- Nominated physicians to serve on the Tennessee Primary Care Advisory Board, Physician's Assistants Advisory Committee, Student Education Fund Board, and the AMA Committee on Health Planning.
- Appointed IMPACT board of directors for 1978.
- Heard from the TMA Ad Hoc Committee on Confidentiality.
- Heard from commissioner of public health, Dr. Eugene Fowinkle, regarding collection of health data through Medicaid program and appointed an ad hoc committee to work with the Department in developing use of the data.
- Received a report from the Maternal Mortality Committee.
- Allocated \$100 to American Medical Student Association to sponsor a breakfast during the association's workshop in Nashville, Nov. 4-5.
- Approved letter from the President of TMA to Commissioner Fowinkle soliciting support of Medicaid Task Force in opposing regulations regarding physician billing of laboratory services performed outside the physician's office.
- Adopted policy regarding refund of dues upon request from deceased physician's estate.
- Adopted policy regarding the acceptance of contributions in lieu of exhibits at Annual Meeting with donations to be used for continuing education.
- Received a report from the Insurance Committee regarding the establishment of a tax-free

municipal bond fund and voted not to sponsor such a program.

- Directed TMA Joint Practice Committee to continue efforts to resolve nurse drug prescribing question with Tennessee Nurses Association.
- Received for information notice of intent to form an HMO (Health Maintenance Organization) in Nashville by the Tennessee Health Care Research, Inc.
- Voted to oppose legislative efforts to incorporate the Departments of Public Health and Mental Health into a Department of Human Resources.
- Approved third quarter financial statement and the proposed budget for 1978.
- Approved recommendation from the Rural Health Committee that the AMA be invited to conduct the 1979 National Rural Health Conference in Nashville.

Executive Committee Meeting—December 1, 1977

The Committee:

- Approved recommendations from Long Term Health Care Committee regarding medical directors of nursing homes.
- Nominated physicians to serve on the Tennessee Speech Pathology and Audiology Advisory Council.
- Approved letter from the President to HEW objecting to national guidelines for health planning.
- Adopted policy of opposition to confidentiality legislation in Tennessee General Assembly.
- Reaffirmed previous policy regarding physician's assistant legislation.
- Heard from representatives of Jeppesen Sanderson Company regarding sponsorship of a patient education program called Med-Prep.

First Quarter Board Meeting—January 14-15, 1978

The Board:

- Received reports and recommendations from division coordinators.
- Approved TMA sponsorship of 2nd Annual Sports Injuries Conference to be held at Middle Tennessee State University, July 19-21, 1978.
- Approved recommendations from TMA Legislative Committee regarding sponsorship of legislation in 90th General Assembly.

- Approved reimbursement of expenses for officers and Board members to attend AMA Leadership Conference in Chicago, Jan. 26-29, 1978.
- Appointed Nominating Committee for House of Delegates.
- Appointed members for the board of the Tennessee Medical Foundation.
- Nominated physicians to serve on TMA standing and special committees.
- Nominated physicians to serve on Tennessee Board of Medical Examiners, Crippled Children's Advisory Committee, Hospital Advisory Committee, and Hospital Licensing Board.
- Selected physicians to receive Distinguished Service Awards at the April Annual Meeting.
- Received a report regarding new dues billing system for county societies.
- Accepted the 1977 financial statement and approved the 1978 budget.
- Directed the TMA Legislative Committee to continue to support the TMA position regarding national health insurance as adopted by the House of Delegates.
- Received a report and accepted the recommendation of the Joint Practice Committee regarding drug prescribing by nurse practitioners.
- Appointed an Ad Hoc Committee on Voluntary Cost Containment to meet with similar appointees from Tennessee Hospital Association.
- Adopted policy requesting AMA to consider Tennessee for grant to participate in AMA's program to improve medical care and health service in jails.
- Appointed committee to study and evaluate a report of the National Commission on the Cost of Medical Care.
- Adopted position of support of efforts by Maryland Medical Society regarding legislation to provide tax relief for physician-sponsored insurance companies established to provide medical malpractice insurance.

Executive Committee Meeting—March 2, 1978

The Committee:

- Reviewed legislation pertaining to nurse practitioners and drug prescribing and reaffirmed TMA's opposition to pending legislation.
- Discussed the report of the AMA's Commission on Cost Containment.
- Received a report regarding the activities of

- the Ad Hoc Committee on Cost Containment.
- Recommended to the Governmental Medical Services Committee that a resolution be introduced regarding the use of *Current Procedural Terminology* and universal health claims form.
- Authorized attendance by AMA delegates and alternates to a regional meeting in Atlanta.
- Rejected requests from outside sources for use of TMA mailing list.
- Adopted policy to make TMA dues delinquency date correspond with April 30 date as established by AMA and adopted new policy to require a \$50 reinstatement fee for members who have dropped from membership one or more years.
- Approved endorsement of Med-Prep Program for members who choose to utilize the service in their practice.
- Referred letter from Tennessee Occupational Therapy Association regarding pending legislation to Legislative Committee.

As you will note from this lengthy outline of business items brought to the attention of the Board during the past 12 months, the work of the Tennessee Medical Association is not only varied, but extremely complex and time consuming. The fact that the workload increased by 50% this past year over 1976 is an indication of the amount of time each member of the Board has devoted to the Association. A continuation of increased workloads can be expected this year and in the years to come.

It has been my privilege to serve as Chairman of the Board for two consecutive years. I can assure you that each item of business brought before the Board has been given fair and full discussion prior to adoption or rejection. Each Board member has worked hard to represent the best interests of all physicians, and I commend them for their efforts. Members of the Board, as well as the officers of the Association, are sincerely dedicated to their job and it has been a distinct privilege to have been a small part of this effort.

REFERENCE COMMITTEE C—received the report of the Board of Trustees and recommended that it be filed.

Report of the Secretary-Treasurer

VIRGIL H. CROWDER, JR., M.D.

The annual audit for the fiscal and calendar year ending December 31, 1977, has been com-

pleted. The customary examination of Association records was made by Mr. Ezra Jones, certified public accountant, whose report contains a summary of accounting policies and pertinent notes to financial statements as well as condensed statements. The Association uses the fund accounting method by specific purposes on a modified cash basis. The net value of property has been reduced by recording depreciation on a straight-line basis and charged as an expenditure. No provision has been made for income tax on unrelated income that might be assessed by the Internal Revenue Service, nor has any provision been made for possible losses on notes receivable.

By virtue of the dues increase, which became effective in 1977, the Association was able to reverse the downtrend in its operating and reserve fund balance. The balance increased from 17 months to 19 months, thus rising above the traditionally accepted conservative level of 18 months. Condensed financial reports prepared in formats similar to the annual audit are appended hereto in order to show the assets, liabilities, fund balance, operating revenues, and expenditures of the Association. The complete audit for 1977 is available for examination.

I assure you that our Association remains financially sound and that its fiscal affairs are being managed responsibly.

**TENNESSEE MEDICAL ASSOCIATION
CONDENSED BALANCE SHEET**

	Year Ended December 31	
	1977	1976
ASSETS		
1. Bank Accounts (Checking and Savings)	\$ 164,662.17	\$140,887.34
2. Investments	750,000.00	500,000.00
3. Interfund Notes Receivable (Student Education Fund)	29,200.00	29,200.00
4. Property Fund—Fixed Assets (Land, Building, Equipment—Less Depreciation)	229,625.53	226,934.86
TOTAL	<u>\$1,173,487.70</u>	<u>\$897,022.20</u>
LIABILITIES AND FUND BALANCE		
1. Accounts Payable	\$ 500.00	\$ 2,536.49
2. Accrued Payroll Taxes	140.58	105.93
3. Deferred Credits (Advance Dues)	128,210.00	
4. O & R Fund	815,011.59	667,444.92
5. Property Fund	229,625.53	226,934.86
TOTAL	<u>\$1,173,487.70</u>	<u>\$897,022.20</u>

CONDENSED OPERATING STATEMENT

	Year Ended December 31	
	1977	1976
INCOME		
Exhibits and Annual Meeting	\$ 14,067.50	\$ 6,574.00
TMA Dues	491,582.50	286,915.00
Journal Advertising (\$20,920.63)		
Investment Income	56,860.66	44,921.37
Building and Miscellaneous Income	8,777.91	8,151.78
TOTAL	<u>\$571,288.57</u>	<u>\$346,562.15</u>
EXPENDITURES		
Administration	\$241,166.23	\$187,149.69
AMA Delegates	15,630.75	6,424.37
Annual Meeting-TMA	21,674.59	20,342.11
Attorney	19,800.00	4,696.25
Board of Trustees—Committees—Council	18,318.00	15,199.80
Continuing Medical Education	9,500.00	25,000.00
Headquarters Building	12,743.24	12,735.58
Health Careers	1,250.00	1,250.00
IMPACT	3,000.00	3,000.00
Journal—TMA		
Legislative Expense	12,865.57	10,305.39
Taxes	9,733.04	7,555.61
Staff Travel	15,077.14	12,623.32
Other Expenses	17,965.79	4,591.86
SUBTOTAL	<u>\$398,724.35</u>	<u>\$310,873.98</u>
Excess Journal Costs (\$ 24,997.55)		(\$ 23,628.53)
Excess of Revenue Over Expenditures	\$147,566.67	\$ 12,059.64
TOTAL	<u>\$571,288.57</u>	<u>\$346,562.15</u>

**JOURNAL INCOME AND EXPENSE
YEAR ENDED DECEMBER 31, 1977**

	Total	Readership	Advertising
INCOME			
Allocation of dues	\$20,020.00	\$ 20,020.00	\$
Advertising	20,920.63		20,920.63
Subscriptions	1,750.83	1,750.83	
	<u>42,691.46</u>	<u>21,770.83</u>	<u>20,920.63</u>
EXPENSES			
Printing and distribution	37,214.11	27,804.40	9,409.71
Editor and Board	4,128.33	4,128.33	
Clerical assistance	600.00	600.00	
Clipping service	935.43	935.43	
Supplies	42.38	42.38	
Salaries	9,166.60	4,583.30	4,583.30
Employee insurance	229.00	114.50	114.50
Taxes	628.64	314.32	314.32
Overhead	14,744.52	9,829.67	4,914.85
	<u>67,689.01</u>	<u>48,352.33</u>	<u>19,336.68</u>
EXCESS EXPENSES	<u>(\$ 24,997.55)</u>	<u>(\$ 26,581.50)</u>	<u>\$ 1,583.95</u>

REFERENCE COMMITTEE—*received the Report of the Secretary-Treasurer and recommended that it be filed.*

Report of the Judicial Council

PARKER D. ELROD, M.D., *Chairman*

As of April 1, 1978, the Council had received reports from each district except for Districts 1, 6 and 9. We would like to encourage the county medical societies to get their reports in to the councilors for their district so that they can report to the chairman. Unless these reports are received on time, it makes it impossible to give a complete summary of the 48 county medical societies' membership and educational activities for the past year. Those county societies which have not reported by the opening of the first session of the House of Delegates will not qualify to have the delegates from their counties seated.

Of the districts reporting there were 2,797 members, 97 physicians who were not members of the societies, 177 new members, 33 members who had died during the year, and 61 members had dropped from the role, making a net increase in the membership of 83. There were 193 meetings during the year and 115 scientific papers presented.

There were several minor cases of questionable professional or ethical conduct that were resolved by the local societies during the year, apparently to everyone's satisfaction, and this is the way it should be done. During the course of the year there was one case of a physician's license being revoked in Maury County, but he was not a member of the Tennessee Medical Association. There was one case of a license being suspended in Hamblen County, and because of the suspension, the physician's membership in the local medical society was revoked and this automatically revoked his TMA membership. In District 2 there was a case involving the use of a nonscientific and unproven therapy for treatment of obesity. The Knoxville physician involved, after consultation with the local council, agreed to discontinue such treatment. In District 8 in Bolivar, Tennessee, a physician was advised against using a particular letter to his patients outlining his threat of denying treatment unless bills were paid. It was pointed out to him that indeed he could

choose his patients in his office, however, in emergency situations regardless of the status of a patient's bill, that physicians were morally and ethically obligated to render treatment.

Since the April meeting last year, there were telephone conference calls in December and February when the problems that had been presented were resolved. There was one called meeting on Oct. 16, 1977, at which time it was decided to investigate the membership of one of the members because of his conduct. This problem has since solved itself, since the Licensing Board suspended his license and he has been removed as a member from the Tennessee Medical Association.

Some of the things that were accomplished during the year: (1) Permission from the Board of Trustees for the Judicial Council to use executive employees of the TMA to help investigate some of the problems arising when the Judicial Council cannot get these investigated otherwise; (2) Closer communication with the Judicial Council and TMA, i.e., notification to TMA when a physician's license is revoked or suspended by the Licensing Board, and continued stressing of the importance of settling ethical matters at a local level.

I would like to thank the Council for the cooperation extended by each of them throughout this past year.

REFERENCE COMMITTEE C—*received the report of the Judicial Council and recommended that it be filed.*

Report of the Executive Director

MR. L. HADLEY WILLIAMS

The last time the Tennessee Medical Association met in Knoxville, I was pleased to have been introduced to this House of Delegates for the very first time. Now, 15 years later, I am pleased to stand before you to present my second report as Executive Director.

The condition of your Association is healthy. The Association's financial status is sound as the Secretary-Treasurer's Report indicates. My primary efforts during the past 12 months have been to strengthen the internal affairs and to be able

to provide more and better services to the TMA membership.

As a service to the busy physician secretary-treasurer of a county medical society, and over 90% of our 48 societies have such a person, TMA instigated a new dues billing and collection service last fall. Designed to remove this chore from the busy doctor, the plan has worked well with a minimum of first-year problems. With a better understanding of the service, I anticipate increasing the number of societies to a near unanimous total in 1978. Also, as part of the service is a new system of recordkeeping enabling our headquarters to furnish each county society with a monthly printout listing of each member, thus assisting the MD-secretary in yet another manner. Expansion of the new system is now being considered in order to have the means of providing additional information regarding members to authorized sources.

As part of the continuing effort to provide the membership with the best and most knowledgeable staff to assist in the Association's work, I am pleased to introduce to you at this meeting Mr. Dave Morison. An attorney, Mr. Morison brings to the Association four years of experience with the Tennessee General Assembly as an attorney for the Legislative Council Committee. Mr. Morison joins Mr. Bill Williams to give TMA what I consider to be the best tandem for legislative representation on Capitol Hill that TMA has ever had. Because lobbying changes, as does the caliber of our elected officials, the effective lobbyists are those with the "know-how"—those who make sense because they offer expertise in their field and have credibility. "Good 'ole boy" lobbyists who rely on cronyism are becoming anachronisms. The ability to influence legislation has never been greater for TMA and the work of Mr. Williams and Mr. Morison is reflected in the Legislative Committee's report to the House.

Additional realignment of responsibilities for the headquarters staff will be undertaken during the months ahead. The purpose of this effort is to enable the staff to be more responsive to both the short-term and long-term needs of the organization. The "do-or-die" struggle medicine now faces against those who are determined to bring this country's medical care system under complete government domination and control must be spearheaded by the Association. This issue has created a battleground not only for the survival of the private practice of medicine but for the entire free enterprise system in this country. As

never before, physicians need to stand united and provide strong and effective leadership on the part of the profession.

The scientific need of the Association is being met through the TMA Continuing Medical Education Committee and Mr. Jim Ingram, director of the Continuing Medical Education Program. Dr. John B. Thomison, in addition to his duties as chairman of the TMA Continuing Medical Education Committee, also finds time to edit the monthly scientific *Journal of the Tennessee Medical Association*. Improvements in several aspects of this publication are quite noticeable and are a direct result of the efforts of another new employee, Miss Jean Wishnick, Managing Editor of the TMA Journal. The quality of this publication is one of which TMA should be proud, and Dr. Thomison's journalistic abilities were extremely complimented when he was appointed Editor of the *Journal of the Southern Medical Association* during the past year in addition to his duties and responsibilities to TMA.

I hope that members of the House find the new format for providing the Delegate's Handbook to be an improvement over the "loose paper and difficult to find and keep up with system" of the past. We have attempted to install other new ideas and to make improvements in conducting the Annual Meeting. Many of the improvements made to date in this regard are due to the hard work and efficiency of Mr. Don Alexander, Assistant Executive Director. We will have on hand beginning tomorrow the largest number of exhibitors ever for a TMA meeting. Mr. Bill Wallace, TMA's efficient exhibit manager, is responsible for much of this expansion.

Some additional responsibilities and activities of the TMA Executive Director and staff are listed. All of these actions are subject to the Board of Trustees, Judicial Council, or appropriate officer or committee.

- Membership administration and recordkeeping.
- Staff AMA delegation.
- Service to TMA officers, trustees, and committees.
- Staffing of the Judicial Council.
- Development of information and material to officers and committees.
- Services to component medical societies.
- Cooperation with specialty societies.
- Publication of the Journal, TMA Newsletter and other publications.
- Administration and implementation of TMA's legislative program.

- Liaison with allied professions.
- Liaison with governmental agencies (state and federal).
- Coordination, planning, and staffing of the Annual Meeting, House of Delegates, and other conferences, seminars, and meetings.
- Maintenance of all TMA records, including financial and membership.
- Dues billing and collection.
- Maintaining headquarters building and property.

Your Association continues to grow, which is a healthy sign. It is an indication of strength and progress and is certainly an encouraging sign for the future. The membership report for 1977 follows.

TMA MEMBERSHIP REPORT As of December 31, 1977

	1977	1976	1975
Active Dues Paying Members	4,004	3,891	3,770
Active Resident-Intern Members	45	37	38
Dues Exempt Members:	317	306	275
Veteran Status	229		
Postgraduate	1		
Military	9		
Disabled	78		
TOTAL	4,366	4,234	4,083
Deaths	56	37	45

AMA members from Tennessee Medical Association:

Active Dues Paying 3,194

Dues Exempt 334

TOTAL ACTIVE 3,528

(80% of TMA members are also AMA members)

I do not feel it appropriate to attempt to delineate all of the staff's activities during the past 12 months. I trust that it is obvious to all members that the planning, servicing, and implementation of directives are accomplished by staff. The multitude of meetings with allied groups and governmental agencies, councils, and commissions speaks for itself when one considers the time involved in planning for such sessions and follow-up activity.

Your staff is firmly dedicated to providing the highest possible quality of services to the membership. I feel TMA is extremely fortunate in

having a most capable, loyal, and dedicated group of employees and on the staff's behalf, we express our gratitude for the opportunity of working for you, the physicians of Tennessee.

REFERENCE COMMITTEE C—received the report of the Executive Director and commended him on the efficient new format for the Delegate's Handbook, suggesting that a similar type loose-leaf notebook be used in the future. The reference committee recommended that the report be filed.

Committee Reports

The following standing and special committees made annual reports to the House of Delegates:

- Committee on Scientific Affairs
- Committee on Legislation
- Liaison Committee to the Public Health Department
- Committee on Governmental Medical Services
- Committee on Tennessee Medical Association Group Insurance
- Committee on Constitution and By-Laws
- Committee on Hospitals
- Peer Review Committee
- Communications and Public Service Committee
- Committee on Continuing Medical Education
- Rural Health Committee
- Committee on Emergency Medical Services
- Advisory Committee to TMA Auxiliary
- Committee on Mental Health
- Committee on Medicine and Religion
- Tennessee Medical Association/Tennessee Nurses Association Joint Practice Committee
- Committee on Maternal and Child Care
- Committee on Long Term Health Care

Committees not reporting:

- Mediation Committee
- Interprofessional Liaison Committee
- Committee on Occupational Health
- Committee on Environmental Health
- Committee on Blood Banks and Medical Laboratories
- Committee on Rehabilitation
- Liaison Committee to Medical Schools in Tennessee

1978 TMA Annual Meeting—House of Delegates Composition

First Session: April 12—Second Session: April 15

EX-OFFICIO MEMBERS

		First Session	Second Session
OFFICERS			
President.....	David H. Turner	Present	Present
President-Elect.....	John B. Dorian	Present	Present
Vice-President.....	J. Bryan Smalley		
Vice-President.....	James C. Bradshaw	Present	Present
Vice-President.....	Thomas M. Crenshaw		
Speaker.....	William H. Edwards	Present	Present
Vice-Speaker.....	Allen S. Edmonson	Present	Present

BOARD OF TRUSTEES			
W. David Dunavant		Present	Present
Robert E. Clendenin, Jr.		Present	Present
Virgil H. Crowder, Jr.		Present	Present
James H. Donnell		Present	Present
George W. Holcomb, Jr.		Present	Present
Nat E. Hyder, Jr.		Present	Present
William O. Miller		Present	Present
Don J. Russell		Present	Present
Joseph L. Willoughby		Present	Present

COUNCILORS			
First District.....	Gilbert A. Rannick	Present	Present
Second District.....	Felix G. Line		Present
Third District.....	James R. Royal	Present	Present
Fourth District.....	Donald H. Bradley	Present	Present
Fifth District.....	Anne U. Bolner	Present	Present
Sixth District.....	Charles M. Hamilton	Present	Present
Seventh District.....	Parker D. Elrod	Present	Present
Eighth District.....	Charles W. White	Present	Present
Ninth District.....	Arden J. Butler, Jr.	Present	Present
Tenth District.....	James B. Witherington	Present	

AMA DELEGATES			
John H. Burkhart		Present	Present
Robert H. Haralson, Jr.		Present	Present
A. Roy Tyrer, Jr.		Present	Present

PAST PRESIDENTS			
Morse Kochtitzky		Present	Present
C. Gordon Peerman, Jr.		Present	Present
E. Kent Carter		Present	Present
J. Kelley Avery		Present	
John H. Saffold		Present	

AMA COUNCIL MEMBER			
John B. Thomison		Present	Present

OTHERS			
Eugene W. Fowinkle		Present	Present

DELEGATES

EAST TENNESSEE GRAND DIVISION			
County Society			
BLOUNT.....	Robert H. Haralson, III	Present	Present
	Marvin D. Peterson	Present	Present
BRADLEY.....	Robert L. Allen	Present	Present
	Marvin R. Batchelor		Present
CAMPBELL.....	Jesse L. Walker	Present	Present
CHATTANOOGA-HAMILTON.....	C. Robert Clark	Present	Present
	Robert C. Coddington	Present	Present
	Thomas L. Buttram	Present	Present
	Durwood L. Kirk	Present	
	William C. Patton	Present	Present
	David P. McCallie	Present	Present
	I. Lee Arnold	Present	Present
	Molly R. Seal	Present	Present
	Edwin H. Shuck, Jr.	Present	Present
COCKE.....	Reece DeBerry	Present	Present
CUMBERLAND.....	Carl T. Duer	Present	
GREENE.....	Dee Metcalf	Present	Present
HAMBLEN.....	John H. Kinser	Present	Present
HAWKINS.....	Ralph Gambrel	Present	
KNOXVILLE ACADEMY OF MEDICINE.....	John R. Nelson, Jr.	Present	Present
	Robert B. Gilbertson	Present	Present
	John T. Purvis	Present	Present
	Alfred D. Beasley	Present	Present
	Joseph B. Moon	Present	Present
	James H. Waters, Jr.		Present
	Richard C. Sexton	Present	Present
	John L. Montgomery	Present	Present
	Leon J. Bogartz		Present
	Richard A. Gillespie	Present	
McMINN.....	William E. Foree, Jr.	Present	
MONROE.....	James L. Allen	Present	Present
ROANE-ANDERSON.....	Harold Kerley	Present	Present
	Richard A. Dew	Present	Present
	E. C. Cunningham	Present	Present
SCOTT.....	Roy L. McDonald		

County Society			
SEVIER.....	Charles L. Roach	Present	
	Vincent Tolley (Alt.)		Present
SULLIVAN-JOHNSON.....	Billy N. Golden	Present	Present
	Joseph K. Maloy	Present	Present
	Sidney A. Wike		
	Jack E. Butterworth	Present	Present
WASHINGTON-CARTER-UNICOI.....	Charles E. Allen	Present	Present
	Duane C. Budd	Present	Present
	Bergin E. Dossett, Jr.	Present	Present

MIDDLE TENNESSEE GRAND DIVISION			
BEDFORD.....	Carl T. Stubblefield	Present	Present
BENTON-HUMPHREYS.....			
BUFFALO RIVER VALLEY.....	Robert M. Coleman	Present	Present
COFFEE.....	Francisco Vallejo		Present
NASHVILLE ACADEMY OF MEDICINE.....	Luthur A. Beazley, Jr.	Present	Present
	Edmund W. Benz	Present	Present
	William B. Crenshaw	Present	Present
	John L. Farringer	Present	
	James W. Hays	Present	Present
	Robert W. Ikard	Present	Present
	Malcolm R. Lewis	Present	Present
	Cullen R. Merritt, II	Present	Present
	Carl E. Mitchell		Present
	Richard P. Ownbey	Present	Present
	Howard L. Salyer	Present	Present
	John L. Sawyers		Present
	Paul R. Stumb	Present	Present
	Willard O. Tirrill, III		Present
	C. Richard Treadway	Present	Present
	Clarence C. Woodcock	Present	Present
	Taylor M. Wray	Present	Present
	John K. Wright	Present	
	Benton Adkins	Present	Present
	H. Victor Braren	Present	Present
	Terry R. Allen (Alt.)	Present	
	Norman D. Hasty (Alt.)	Present	
	William M. Jackson	Present	
DICKSON.....			
FENTRESS.....			
FRANKLIN.....	Dewey W. Hood		
GILES.....	William K. Owen		
JACKSON.....	Paul M. Burd		
LAWRENCE.....	B. P. Davidson		
LINCOLN.....	William M. Young	Present	Present
MACON.....	Charles C. Chitwood		
MARSHALL.....	Kenneth J. Phelps, Jr.	Present	Present
MAURY.....	Thomas R. Duncan	Present	Present
MONTGOMERY.....	James Hampton	Present	Present
	Reginald S. Lowe	Present	Present
OVERTON.....	Will G. Quarles		
PUTNAM.....	Charles E. Jordan	Present	Present
ROBERTSON.....	John B. Turner	Present	Present
RUTHERFORD.....	Bernard S. Davison		
	John T. Cunningham	Present	Present
SMITH.....	David E. Darrah	Present	
SUMNER.....	Clarence R. Sanders	Present	Present
WARREN.....	T. L. Pedigo	Present	Present
WHITE.....	Donald H. Bradley	Present	Present
WILLIAMSON.....	John B. Youmans	Present	Present
WILSON.....	J. C. Bradshaw, Jr.	Present	Present

WEST TENNESSEE GRAND DIVISION			
CONSOLIDATED.....	Oscar M. McCallum	Present	Present
	Lee Rush, Jr.	Present	Present
	Thomas K. Ballard	Present	Present
	James T. Craig, Jr.	Present	Present
HENRY.....	Thomas M. Minor		
MEMPHIS-SHELBY.....	Thomas G. Dorrity	Present	Present
	George S. Lovejoy	Present	Present
	Daniel Scott, Jr.	Present	Present
	Hugh Francis, Jr.	Present	Present
	Francis H. Cole	Present	Present
	Hamel B. Eason	Present	Present
	Tinnin Martin, Jr.	Present	Present
	Dee J. Canale	Present	Present
	James W. Pate	Present	Present
	Fenwick W. Chappell	Present	Present
	John D. Pigott		Present
	Phillip A. Pedigo		Present
	C. Eugene Jabbour		Present
	Brown Brooks		Present
	James T. Galyon		Present
	Paul H. Williams		Present
	James A. Moore		Present
	T. Kyle Creson		Present
NORTHWEST.....	James W. Shore	Present	Present
	Hobart H. Beale	Present	Present
TIPTON.....	Warren A. Alexander	Present	Present

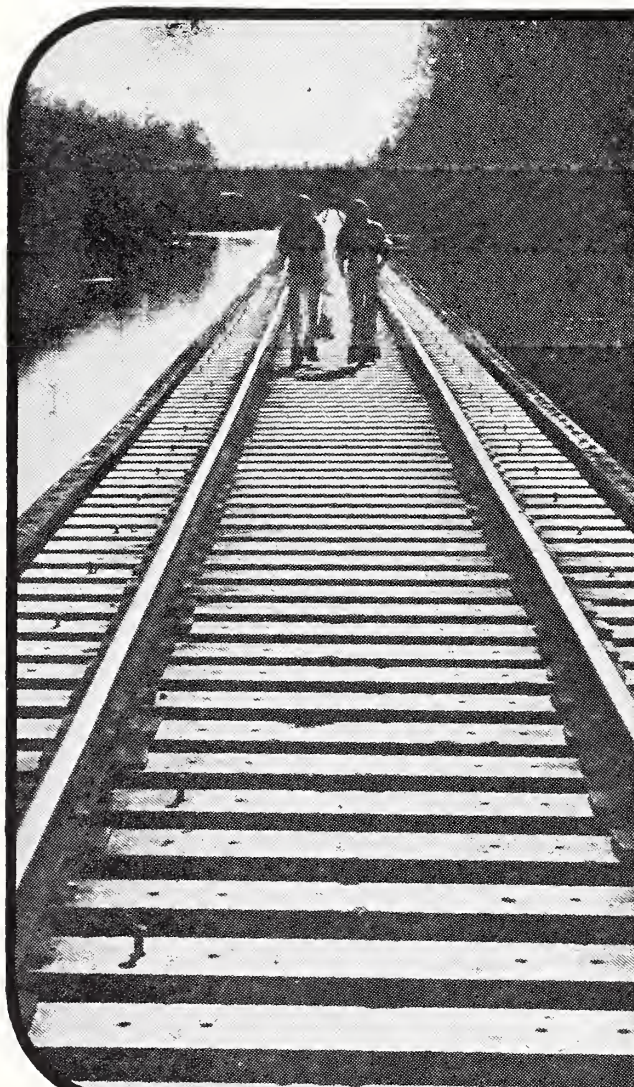
The above information taken from attendance record cards signed by the delegates.

STATE MEDICAL SOCIETY DUES—1978

1. Idaho	\$310	27. Indiana	\$181
2. Alaska	300	28. Texas	180
3. South Dakota	300	29. Florida	175
4. Wisconsin	300	30. Rhode Island	175
5. Wyoming	300	31. California	165
6. District of Columbia	295	32. Maryland	160
7. Colorado	285	33. Nevada	160
8. Iowa	275	34. New Hampshire	150
9. Arizona	250	35. North Dakota	150
10. Hawaii	240	36. Oklahoma	150
11. Arkansas	225	37. West Virginia	150
12. Georgia	225	38. Washington	147
13. Kentucky	225	39. *North Carolina	140
14. Minnesota	225	40. Puerto Rico	140
15. Pennsylvania	225	41. New Mexico	135
16. South Carolina	220	42. Illinois	131
17. Oregon	212.50	43. Tennessee	130
18. Delaware	205	44. Vermont	130
19. Louisiana	200	45. Alabama	125
20. Maine	200	46. Kansas	125
21. Mississippi	200	47. Ohio	125
22. Montana	200	48. New Jersey	120
23. Nebraska	200	49. Missouri	115
24. New York	200	50. Massachusetts	110
25. Utah	195	51. Virginia	105
26. Michigan	190	52. Connecticut	100
53. Canal Zone	\$18		

Average Dues—1978—\$190
1977—\$158

* New members pay \$165 first 5 years.



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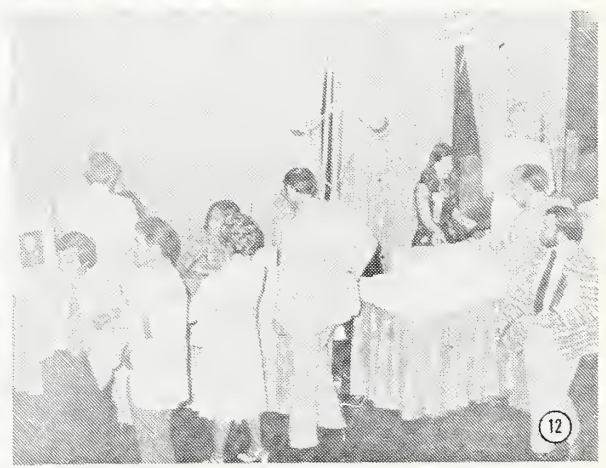
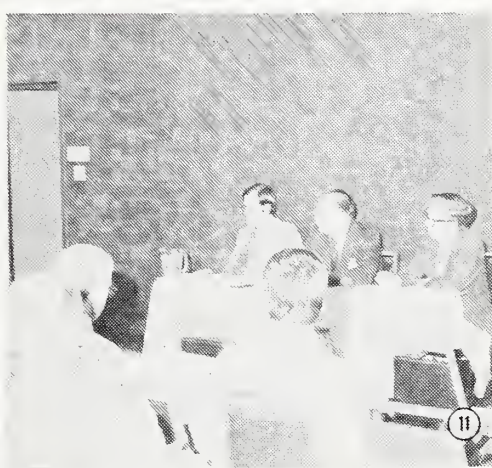
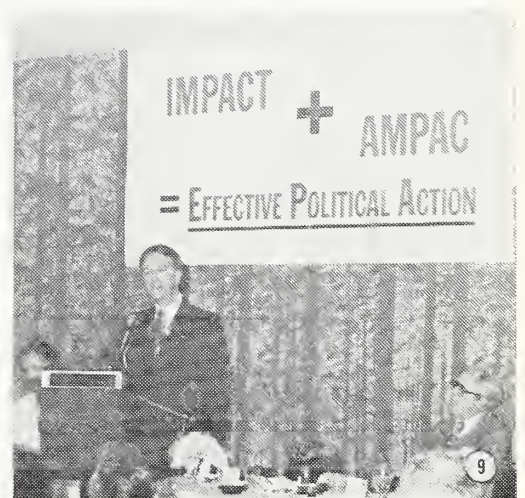
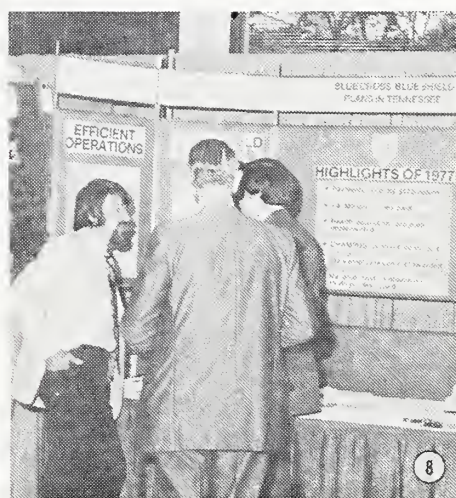
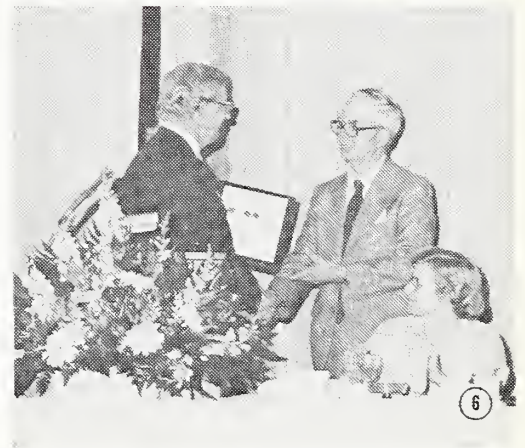
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a way!**

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Annual Meeting Highlights—Knoxville 1978



1) Outgoing President David H. Turner, M.D., Chattanooga (left) relinquishing gavel to incoming President John B. Dorian, M.D., Memphis. 2) TMA President-Elect John B. Dorian, M.D.; TMA Auxiliary President-Elect, Mrs. Ruth Crenshaw, Memphis; AMA President-Elect Tom Nesbitt, M.D., Nashville. 3) Newly elected President-Elect, James W. Hays, M.D., Nashville, making acceptance speech to TMA House of Delegates. 4) 5) 6) Distinguished Service Award recipients Oscar M. McCallum, M.D., Henderson; I. Lee Arnold, M.D., Chattanooga; Albert W. Diddle, M.D., Knoxville. 7) Community Service Award presented to Mrs. Frances Meeker, medical reporter for the *Nashville Banner*, by TMA Board Chairman David Dunavant, M.D., Memphis. 8) Doctors and exhibitors chat in TMA exhibit hall at Hyatt Regency. 9) Senator Bob Packwood (R-Ore.) addressing annual IMPACT Breakfast. 10) TMA health project contest winner, Mr. Chris Davenport, Knoxville, receiving \$500 check from Dr. Turner. 11) Reference committee of House of Delegates in session. 12) Largest registration ever at a TMA Annual Meeting.

It's Not Too Late!

JOHN H. BURKHART, M.D.

Let me first express my appreciation for the invitation to speak to you this morning. I feel obligated at the outset to relieve the program chairman of any responsibility for anything that I might say to you, for he left the subject of my remarks completely open and is, therefore, not to be blamed for any lack of appropriateness which might result. It's really just as well, I suppose, for the trouble is that no matter what the occasion or the audience I have been saying much the same thing in one way or another for several years. My theme has been, perhaps, a trifle overworked but I can't for the life of me think of a better one.

As I look around a group or an audience like this I'm always struck by the fact that although we have many things in common, no two of us are entirely alike, for Almighty God made none of us identical. In his wisdom he gave us the

good a job with this trusteeship, so far. Our ancestors didn't do too well with it and you and I aren't doing much better.

I don't think it is necessary to say to a group as intelligent as this that we are living in the most troubled, perilous, and dangerous age of mankind's history. You know that. You have heard it often enough. We have developed an atomic, a bacteriological, a biological and a hydrogen warfare that can blast us all off the face of the earth. This has never been true before in history. You see, we got a little ahead of ourselves somehow and have learned all at once how we can all die together before we quite got around to finding out how we can all live together. Someday it may be truly said that all men were cremated equal; for the first time this is really possible.

There is an air of fatalism and an attitude of what does it matter among so many of our young

Our one common characteristic . . . is our citizenship in a world in turmoil and our individual and collective responsibility for its condition and for its survival.

freedom to differ, to diverge, to be individuals, and to make our own choices so that from the beginning of our lives to the end of them we are not the same, we are not equal, we are not in many ways even similar. And yet there is one common characteristic which all of us do have, the one which I want to talk about today, that basic one that binds us all together and makes us all so interdependent upon each other. That characteristic is our citizenship in a world in turmoil and our individual and collective responsibility for its condition and for its survival. Whatever our age, whatever our color, whatever our sex, whatever our social or economic status, whatever our religion, whatever our politics, whatever our strength, whatever our talent, whatever our level of educational achievement—we are still each of us one of God's children, entrusted with a share of stewardship in this world of His creation, and you and I haven't done too

people that they seek their escape from the pressures and problems and the dark outlook of the future along many spectacular and exotic avenues ranging all the way from protest demonstrations to dope addiction. It isn't just the young who have problems; everybody has problems and some of us middle-aged adults think ours are more pressing than those of youth. After all, until you are 18 your parents take care of you and after you are 65 the government takes care of you—so really it is in those 47 years in between that you have to shift for yourself.

The social, the economic and the moral issues of today have caused a confusion in the minds of many which they find impossible to resolve. You can get an argument on either side you care to take in any of the major conflicts of our time. Some people feel that since God made the blackbirds and the redbirds and the snow-white dove and loves them all that man has no right to separate the races just on the basis of color alone. Others will point out just as quickly that blackbirds live with blackbirds, redbirds with redbirds, and the dove with neither, and in the

Presented at the Annual Meeting of the Tennessee Medical Association, Medicine & Religion Breakfast, Knoxville, April 15, 1978. Sponsored by the Committee on Medicine & Religion of the Tennessee Medical Association.

end we wind up hearing such fantastic statements as those which proclaim that the Constitution is unconstitutional, the Supreme Court is not supreme and the law is illegal. To paraphrase Kipling—if you can keep your head when all about you are losing theirs, then maybe you'd better look around again; you may be missing something.

My point is that we are living in a troubled, dangerous and discouraging time. There are

If you can keep your head when all about you are losing theirs then maybe you'd better look around again, you may be missing something.

many reasons to be discouraged, many reasons to be pessimistic and fatalistic about the future of mankind. But I am not here today to tell you why you should be discouraged. I am here to tell you why I am not discouraged, and that is because there is still in our world, troubled though it is, that one thing that is more powerful than anything that has been discovered, is being discovered or will be discovered in the laboratories of modern science. You know what that is. It is that something within the heart and mind of an individual or a group which when tied to an eternal truth results in all of humanity being lifted up to a new level.

It may be a 15-year-old boy down on the New Orleans dock seeing slavery for the first time. He turns to his dad and he says, "This is wrong; it is real wrong, and someday I am going to do something about it. When I hit it I will hit it hard." Forty years later he sits in the White House signing the Emancipation Proclamation and all of humanity is lifted up to a new level.

It may be a young scientist, 43 years of age, one whole side paralyzed. He hobbles out of the French town where he lives. The Teutons are attacking the city and the neighbors pick up rocks and throw them at this man and say, "Get out of town. We don't need you. You are just a useless mouth to feed." He comes back to the modest kitchen of his home with the blood and tears intermingling on his cheeks and says to his wife, "They want me to leave town, but I am going to stay, because I have something to give France that no man with a sword can give."

Twenty-five years later when the French people chose the greatest Frenchman who ever lived they didn't choose Napoleon. They chose a little, crippled, half-paralyzed guy by the name of Louis Pasteur. Today modern medicine rests more upon his titanic work than that of any other man in medical history. Why? Because he allowed himself to be captured in the clutch of a great conviction to which the future belonged.

You see I don't really care too much whether you think this is a good speech or not, but I do care tremendously whether or not when you leave here this morning you realize that each and every one of us in a very special way is either a part of the answer or else we are a part of the problem in this the world's most dangerous and perilous generation.

Well, you say, that's all right. But be a little more specific—come to the point. None of us wants to be a part of the problem; we would all rather be a part of the answer. Tell us what we can do. Well, you can throw me out now if you want to, but I might as well be honest and admit that I just can't answer that question. I don't know exactly what you as an individual or I as an individual can do, but I can do this—I can ask you in return four other questions and I can tell you that if you can answer these four questions in the affirmative that I can guarantee you will leave here a richer person than when you came, not because I have asked them, not because they are my questions, but simply because they are so fundamental and so basic in this business of adequate living in a world like this.

My first question is this: Do you believe that you have a wholesome, positive attitude toward life? Do you have a positive, wholesome attitude

Each and every one of us is either a part of the answer or else we are a part of the problem. . . .

toward your work? Do you have a positive, wholesome attitude toward your fellow workers? Do you have a wholesome, positive attitude toward life? We all have problems. But unless we attack these problems from a wholesome, positive attitude we become part of the problem instead of part of the answer. I'm not talking about a silly, superficial optimism. I am talking about a basic,

wholesome, positive attitude toward your problems—whatever they may be.

Take the church, for example. Do you know who the greatest enemy the church has today is? It is not the atheist. Who follows an atheist? The greatest enemy the church has today is the negative, gloomy, sour kind of churchmember. He may never miss church on Sunday but he continually goes around looking as though he thinks he will have a special seat in Heaven if he eternally looks and acts like he has a stomachache. These people always look as though they have swallowed the box and threw the aspirin away. You never hear them say anything at a meeting except, "Well, you can't do that." If I had my choice of living the rest of my life with that kind of person, the negative, gloomy, sour kind or a good, kindly sinner with a wholesome, positive attitude toward life, so help me—I would take the good, kindly sinner. In fact I did.

What about you? Do you have a wholesome, positive attitude toward life?

My second question: Do you have a self fit to live with? Do you have a self fit to live with, fit for yourself to know? I'm not talking about a goody-goody religion. I don't even believe in goody-goody religion. I am talking though about that something that allows you to go to bed at night and to look deep down inside yourself and say, "It's all right there." To look at your fellowmen and your treatment of them during the day and say, "It's all right there." To look at your Creator and your relationship with Him and say, "It's all right there." This will let you know if you have a self fit to live with, fit for yourself to know; and if you don't, nothing for you will ever take its place. Some people today are trying to

Politics is dirty, but it didn't get dirty till people made it dirty and it's not going to get any cleaner until people . . . help clean up the mess. . . .

escape this question through drink, drugs, sexy stories, and one thing and another. They are not bad people. They are just preoccupied with lesser things. They are majoring on the minor. They are giving first rate attention to second rate things. They just don't have selves fit to live with, and so they have to use one or another of these routes as escape. What about you? Do you have a self

fit to live with, fit for yourself to know?

The third question: Do you believe that you have a world fit to live in? I can almost hear you say, "Are you kidding?" Let's do be honest about it. Do we really have a world fit to live in? Well, it is a pretty nice place; it is the best place we have ever lived, but it really isn't a fit place to live. Take our religious situation again for an example. Do you know that we are divided up into 256 different denominations of Christians; and what are we arguing over? It wouldn't be so bad if we were divided over the great and more

Tell me what you believe, not what you give lip service to, and I will tell you what you are and what you will be in ten years. . . .

important issues such as the Fatherhood of God, the Brotherhood of man, or the infinite worth of the human personality, but we're not. We are divided over little petty theological questions that don't amount to a hill of beans. If Jesus were to come back to one of our Christian conventions and hear us discussing the various forms of Baptism, or the apostolic laying on of hands, or which one of the 88 different theories of the atonement is correct, so help me—He wouldn't know what we were talking about, and yet these are the things that are tearing us apart. I have no sympathy, I have no respect for the kind of preaching that stands behind the pulpit in a torn and bleeding world like this and says with self-righteous quivering chin, "If you don't believe like I do you are going to hell." Those who talk like that never had the spirit of Almighty God in the first place.

So much for the church. What about your political philosophy? I don't care whether you are a Democrat or a Republican. We are all of us Americans first and I think that is more important. But we will never have a country fit to live in politically as long as people like many of us who represent a somewhat higher grade of intelligence than the average are willing to sit off at a safe distance and say, "Politics is dirty, I wouldn't touch it." You can bet your bottom dollar politics is dirty, but it didn't get dirty till people made it dirty and it's not going to get any cleaner until people who have a sense of decency and integrity are willing to get down on their hands and knees with a scrub brush and a scrub

pail and help clean up the filthy mess in both political parties. Politics is simply the art of making government work. It's the machinery by which society makes its moral decisions. It is no more basically dirty than were the rivers of this country dirty before we began pouring our sewage into them. And mostly this has been by default. We get just as good politics and just as good government as we are willing to fight for, and just as bad politics and just as bad government as we are willing to stand for. The saving of our way of life from destruction is not a job delegated solely to a group of young men fighting and dying on the field of battle. It's a job for every citizen. Too many citizens in this country are afflicted with the disease of "spectatoritis," sitting in the grandstand, knowing just what play ought to be called—finding fault—criticizing, but offering no actual aid.

One of our teachers in the public school system in Knoxville told me not long ago about one of the little boys in her class standing up in front of the class and giving the Pledge of Allegiance to the flag. This is what he said, which caused

Finally my last question: Do you have a philosophy fit to live by? Some will say that it really doesn't make any difference what you believe nowadays, that conformity is the trend of our times, and if you have a fundamental philosophy about anything you have to adapt it to be one of the crowd. I say that it does make a difference, because you tell me what you believe, not what you give lip service to, but what you really believe, and I will tell you what you are. Tell me what you believe and I will tell you what you will be in ten years from now, because in the last analysis we all believe something and we live actually by what we really believe. The question then becomes of paramount importance—What is your philosophy of life, and is it fit to live by? There are many good ones, but I submit that the one person who knew more about living at its best than anyone who ever walked the face of the earth had a pretty practical philosophy. "Do unto others as you would have them do unto you," He said. "He that would be greatest among you let him be servant of all." "Inasmuch as you do it unto one of the least of these, my brethren,

A newer world does not require a newer planet . . . [It is] a world where people are as concerned about their responsibility as they are about their rights, their morality as their mortality, their obligations as their entitlements.

considerable amusement among his classmates. "I pledge allegiance to the flag of the United States of American and to the Republic for which it stands; one naked individual, with liberty and justice for all." I laughed a little too when she told me that, but that night I couldn't get to sleep and I kept thinking about what that little boy had said, and you know I decided that he had something there. You tell me in how many other countries it is true that one naked unprotected individual, maybe not born with a silver spoon in his mouth, maybe not even able to have the education he would like to have had, still does not have to be a servant or a valet or a slave just because his grandfather was a servant, or a valet, or a slave. You tell me in how many other countries it is true that one naked unprotected individual under our free enterprise system is able to grow as tall as God meant him to be when He thought of Him first. I'm telling you that if we sell that down the river we will sell down the river that which has made this country the greatest country in the world.

you do it unto me." That kind of a philosophy will work.

Well, this is the theme that keeps hanging in my mind, this is the problem that confronts us every waking hour and sometimes disturbs our sleeping ones. I believe that whether we are going to continue to exist and to populate God's earth is a real question for concern and that the answer to it can come only as we analyze our individual and collective attitudes toward life, our own honesty, decency, and integrity, the religious and political world in which we live, and the philosophy by which we live.

The burning question is "What are we going to do about it?" It's high time we did something. As a place to start I ask you to consider the appeal so well expressed in one of the gems of English literature written by the Poet Laureate Alfred, Lord Tennyson, when the subject and hero of his epic poem *Ulysses* urges his sailors, even in the twilight of their lives, to go once again to sea to explore the unknown. To his sailor friends Ulysses says:

Come, my friends,
 'Tis not too late to seek a newer world.
 Push off, and sitting well in order smite
 The sounding furrows; for my purpose holds
 To sail beyond the sunset, and the baths
 Of all the western stars, until I die.
 It may be that the gulfs will wash us down;
 It may be we shall touch the Happy Isles,
 And see the great Achilles, who we knew.
 Though much is taken, much abides; and though
 We are no now that strength which in old days
 We are not now that strength which in old days
 Moved earth and heaven, that which we are, we are—
 One equal temper of heroic hearts,
 Made weak by time and fate, but strong in will
 To strive, to seek, to find, and not to yield.

A newer world does not require a newer planet. There is nothing really wrong with the earth itself. It hasn't changed a great deal in the millions of years it has existed except for a few temperature and climate changes here and there and an insignificant topographical alteration or so. It existed long before man came to inhabit it, and it can and probably will exist long after man departs. It makes its normal revolutions around the sun in its stated periods of time as it always has, undergoes its seasons, its cycles of life and death and rebirth of life and shows no signs of changing any of these routines very drastically. I did read the other day where some scientist was quoted as saying that he expects the earth to explode in a mass of flame and mineral ash in about 50 million years. I'm determined not to worry about that. I'm more concerned that its population may explode in a mass of flame and human ash long before that—perhaps even in my lifetime or in the lifetime of my children.

And here, my friends, is the real danger, here is the real threat, here is the real need to seek a newer world; a world where people are as concerned about their responsibility as they are about their rights, as concerned about their morality as they are about their mortality, as concerned about their obligations as they are about their entitlements. Somewhere, somehow we have lost the concept that we are our brothers' keepers, that we are our children's teachers, that we are our country's preservers, that we are moral as well as mortal. I don't know the answer to this condition but I do know that there *is* one in a different kind of world where men care about the problem and want to solve it. The answer will be found only as you and I begin, if we haven't already, the quest for something better than we have.

"Come my friends—It's not too late!"



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 chlordiazepoxide HCl and 2.5 mg clidinium Br.

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Indications: Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

"Possibly" effective: as adjunctive therapy in the treatment of peptic ulcer and in the treatment of the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

Final classification of the less-than-effective indications requires further investigation.

Contraindications: Glaucoma; prostatic hypertrophy, benign bladder neck obstruction; hypersensitivity to chlordiazepoxide HCl and/or clidinium Br.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants, and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Physical and psychological dependence rarely reported on recommended doses, but use caution in administering Librium® (chlordiazepoxide HCl) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions) reported following discontinuation of the drug.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy. Advise patients to discuss therapy if they intend to or do become pregnant.

As with all anticholinergics, inhibition of lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude ataxia, oversedation, confusion (no more than 2 capsules/day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider pharmacology of agents, particularly potentiating drugs such as MAO inhibitors, phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions reported in psychiatric patients. Employ usual precautions in treating anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship not established.

Adverse Reactions: No side effects or manifestations not seen with either compound alone reported with Librax. When chlordiazepoxide HCl is used alone, drowsiness, ataxia, confusion may occur, especially in elderly and debilitated; avoidable in most cases by proper dosage adjustment, but also occasionally observed at lower dosage ranges. Syncope reported in a few instances. Also encountered: isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent, generally controlled with dosage reduction; changes in EEG patterns may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice, hepatic dysfunction reported occasionally with chlordiazepoxide HCl, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy, constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

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How to Start to Stop

GERALD FARLEY

There is a vicarious thrill in reading the occasional news story about "Old Doc" who started practice in a one-room walk-up 60 years ago and today at 92, is still going to the office every day to serve the health needs of the community. However, fewer doctors today are practicing until they "die in the harness." There are a number of reasons for this in addition to the major fact the physician, as is true of any other individual, is entitled to retire and enjoy the fruits of long years of arduous service to society.

Today (and this wasn't always the case) the physician is covered under the federal Social Security program and, in addition, is allowed to establish a tax deferred Keogh, Corporate, or IRA Retirement Plan. He no longer has to depend on after tax savings to finance living expenses and the things he would like to do after he ceases to practice.

A recent and more dramatic reason for an increasing number of physicians retiring from active practice is the professional liability insurance situation. Malpractice insurance costs have doubled and tripled with no relief from the nearly confiscatory costs for the older doctor who might want to reduce his workload to an acceptable level for his aging years. Insurance protection is needed whether he practices two days a week or 65 hours per week.

A third factor is the sociological demand to keep up-to-date in an era of rapid change. Patients no longer automatically consider "Old Doc" the very best because he has been in practice for 30 years. They sometimes question if he has the knowledge and expertise of younger physicians more recently graduated from medical school. And his colleagues on the hospital staff are requiring stricter adherence to eligibility standards for medical and surgical procedures.

Mr. Farley is assistant director of the Department of Practice Management, Division of Medical Practice, American Medical Association.

There is a considerable amount of work involved in closing a medical office. Before you can walk away from your practice, you must consider:

- Informing your patients
- Advance notice to your employees
- Transferring medical records
- Medical record retention
- Medical insurance claim forms that come in after you have locked the door
- Cancellation of business insurance policies
- Your narcotics license
- Disposition of narcotics and medical supplies
- Rent, lease contract, disposition of real estate
- Office equipment and furnishings
- The telephone
- Memberships in various associations
- Magazine subscriptions
- Business bank account
- Taxes
- Keogh or pension program involving employees

In addition, you will want to carefully review your own insurance program, stock portfolio, other savings and investments and any real estate situations in which you may be involved.

You may also want to arrange for continued medical care for yourself and your family, perhaps including a medical-hospital insurance program.

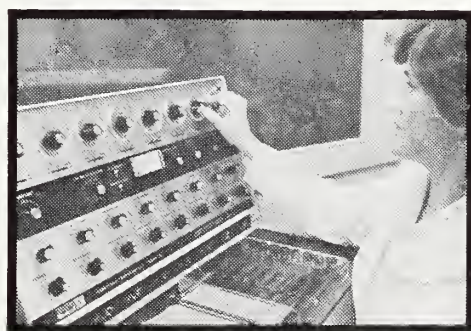
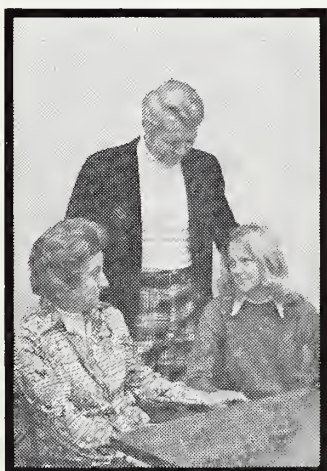
Advance planning should start a minimum of two years ahead of the closing date. Many of the things you do will have to be accomplished in the last three months and even later, but you can be *prepared* to do them. For example, you may wish to give your patients three months' notice, assuming a general type practice. The letter you will send to active patients can be prepared in advance. Your files can be checked for the "actives" and "inactives." For patients who indicate to you that they want their medical record information transferred to another physician, you can plan the best way to do this. (You will want to keep your records, of course, and forward only summaries or Xerox copies.)

When and how to give notice to your employees is an individual situation problem. You will need adequate help in your office to the last days of practice and probably some assistance for some time thereafter. If you have career employees who want or need to continue to work, they will logically start looking for new positions as soon as they find out you have definitely specified a closing date. Perhaps you can arrange for a key person to stay with you until the end, or find out if temporary help is available in your area to fill in any necessary spot that becomes vacant.

You may find it advantageous to set a closing date to coincide with your rent or lease contract. You should check ahead with your county medical society or medical equipment distributor to find sources available for disposing of your office equipment, medical books, etc. Once the door is locked and the lease cancelled, these things have to be moved, and putting them in storage is at best a temporary solution.

Make every effort possible in the last three months of practice to collect outstanding receivables. The collectibility of old accounts declines radically after the office is closed. You might well consider turning uncollected accounts over to a medical collection service immediately after the closing date. The collection service should receive them quickly in order to achieve recovery for you.

Physicians who have practiced alone for years—by choice—may wish to acquire a partner for the last year or two of their practice, with the purpose in mind of providing uninterrupted medical service to patients as well as to have a ready buyer for their practice when that retirement date finally arrives. And, while patients appreciate the opportunity of gradually adjusting to a new physician, the new physician will also benefit from being introduced into an established practice, since this method typically results in high patient retention.



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\$250,000 Major Medical Insurance for Employees. \$200 annual deductible per person. \$5,000 life insurance with accidental D & D.	Alexander Hamilton Life Insurance Company of America	John E. Lovelace and Associates, Inc. 4205 Hillsboro Road Nashville, TN 37215 Telephone: (615) 385-0923
Hospital Indemnity Insurance. \$20 to \$50 per day while hospitalized in addition to any other insurance. Spouse and children eligible.	Life Insurance Company of North America	Armistead, Miller, and Wallace P.O. Box 1020 Nashville, TN 37202 Telephone: (615) 242-2601
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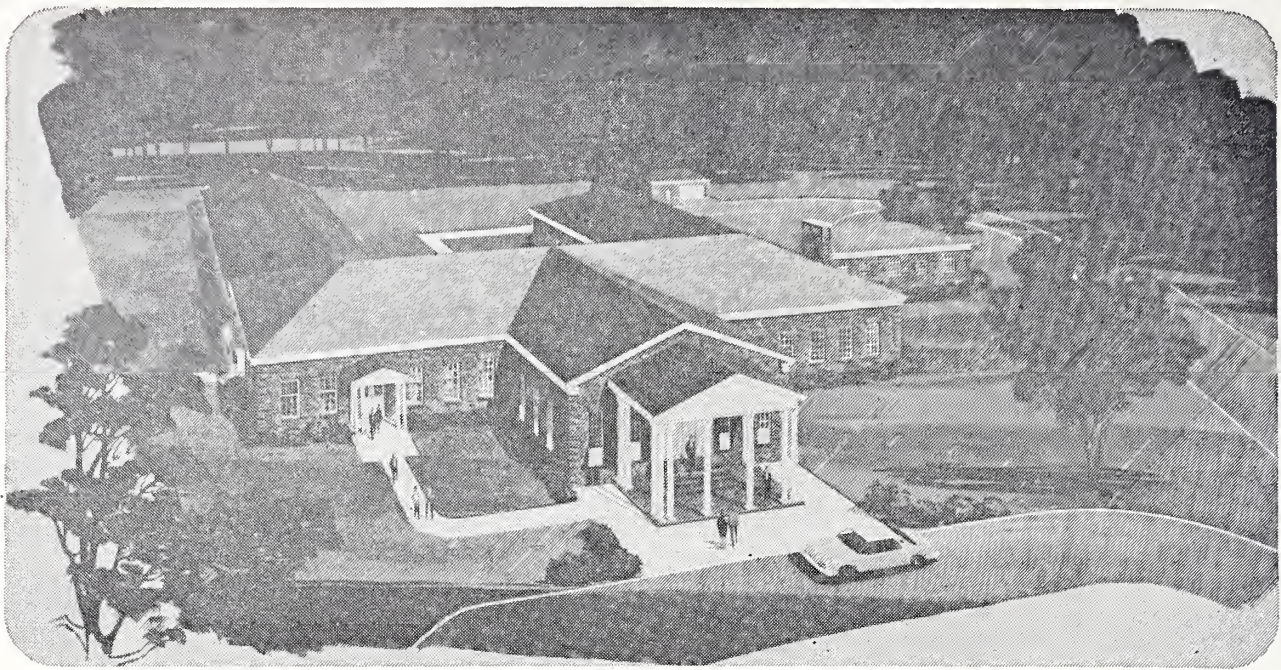
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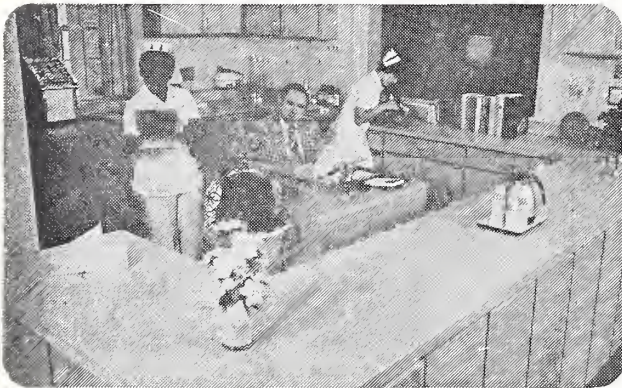
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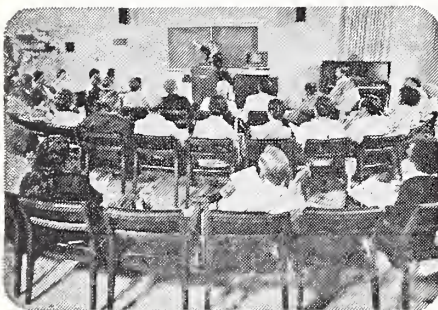
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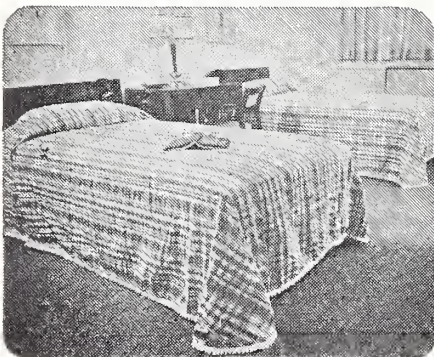
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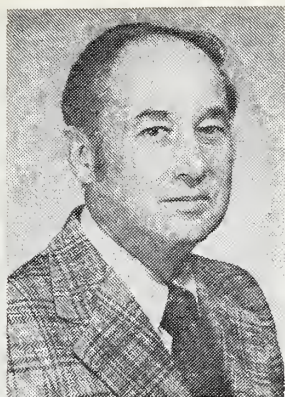
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FELLOWSHIP HALL WILL ARRANGE CONNECTION WITH COMMERCIAL TRANSPORTATION



JOHN B. DORIAN

insuring . . .

"How's our insurance company doing?" This is a common question from TMA members. The company referred to is the State Volunteer Mutual Insurance Company, and the question is directed toward its officers or those of the TMA.

Now in the first quarter of its third year of operation, the company is, in a word, doing well. Its excellent management is composed of insurance specialists and a dozen or so dedicated physicians. Its assets are in excess of \$20 million, and it is the sole medical liability coverage for more than 4,000 Tennessee physicians.

So, what's the point of a big splash about the liability crisis now? The point is that the directors of the company have, since its inception, emphasized what cannot be repeated too often: the company cannot, and wasn't intended to, solve the medical liability crisis. To be sure, it took the cry from the crisis generated by Shelby Mutual's pull-out, and by the JUA spawned by a sympathetic but misled legislature. By affording an alternate

president's page

approach to coverage with predictable premium structure, it gave the profession what it needed most to deal with the situation—time. It also halted that aspect of inflation in health care which was, in 1975, uncontrollable in Tennessee, namely, medical liability premiums.

The SVMIC will mature in five years. The original five-year premium projections visualized premiums in the fifth year of 2.25 times the first year. So far, there has been a significantly smaller increase than anticipated. This trend may well continue, if physicians are willing to vigorously pursue efforts to remedy the crisis.

The company has recently decided not to require capital contributions for its new policyholders. This was a good move, in light of other carriers returning to the Tennessee marketplace.

Do not be misled by the outside carriers' attractive "price" offers. They are not selling the same coverage as SVMIC, and they "selectively" insure those from whom they will derive the largest margin of profit. Your company is literally owned and operated by physicians. It has a superior product to offer. Why?

The answer is simply that with physician operation, this company has an opportunity to make a significant contribution to the public, over and above the inflationary aspect. For example, the directors have instituted a program using the company's experience to dissect aspects of each claim. They believe that there is a situation which is, and a patient and a physician who are, likely to produce a claim. Ultimately, through analysis of data by underwriting and claims review specialists, we will be able to alert the physician as to what conditions are potentially explosive.

Already, the SVMIC underwriting committee has reduced or denied coverage for a few physicians who consistently place personal gain above the public welfare and professional ethics. The committee will also, in a few instances, recommend coverage for a physician only if he limits his practice to a demonstrated area of competence. All such restrictions will be made fairly, after much medical deliberation, and without malice.

It's my hope that when the company is five years old (and not before), all our capital will be returned to us. It's also my hope that the company will not write other forms of insurance or invest less conservatively than in the past, before 1981.

To summarize, on May 1, 1978, the SVMIC is progressive, yet conservative; it is innovative, yet reasonable. It does not presume to be the answer to the medical liability crisis. (There are now 400 claims pending against our policyholders.) It may, however, provide the impetus for reasonable approaches to resolution of the situation in our state.

Sincerely,

John B. Dorian, M.D.
PRESIDENT

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JUNE, 1978

When I was a boy we often spent Sunday afternoons visiting friends of my parents, some of whom were friends of their parents. I won't pretend this was always anticipated with glee, but there was one visit I was always ready to make. I cannot recall anything about the people except that they were very old, but their home was on Cameron Hill, an old, well-established residential area in Chattanooga, with shady streets and nice homes—a comfortable neighborhood. What impressed itself on my young mind, and established it as a permanent fixture in my memory, was a marvelous musical instrument they had called descriptively but unimaginatively a music box. It was one of those large ones with changeable metal discs, and it made unbelievable music. I determined one day to have one of my own, and I do. Its music-making capacity is still incredible, unsurpassed by anything made today.

As with most things, there is some good news and some bad news. The same mobility and technology which ended the Sunday afternoon visits also robbed Chattanooga of Cameron Hill, as it is now a part of "super-slab." Super-slab cuts up cities and mountains and neighborhoods. I-440 in Nashville is being fought because it would isolate North Nashville and I-40 is incomplete through Memphis because as presently projected it would chop up Overton Park. On the other hand, when I was in college, the drive from Chattanooga to Nashville was a challenge to one's skill and endurance, whereas now a journey by automobile between any of the major centers of the state is accomplished with ease, even though there are still a lot of miles between Memphis and the Tri-Cities.

This spring several hundred of our colleagues made the trek to the yearly gathering of Tennessee's doctors, held this year in Knoxville, where nature cooperated with a show of her own to make the meeting an outstanding success for doctors and spouses. Following an early "summer," the weather turned cool and crisp, bringing clear blue springtime skies. The March warm spell which followed the severe, protracted cold of the winter had brought foliage and flowers along suddenly and simultaneously, so that both dogwood and redbud were at their height, making the drive into Knoxville pure delight. And how could one describe the "Dogwood Trails" in Knoxville? Gorgeous? Magnificent? Superb? Supercalifragilisticexpialidocious? Words fail in trying to conjure up the image of pink and white

editorials

Traveling to the Gathering, or, Tiptoeing Through the Dogwoods

There is a lot to be said for our present-day mobility and technology. We are able, for example, to take long weekend jaunts to the country for hunting, fishing, boating on lakes, many of which are man-made, or just sightseeing; or, if so moved, we can take excursions of the mind by way of television. But it has its disadvantages, too.

drifts along the roadside. If you were there, you know what I mean. If you were not, you don't, and you should have been.

J.B.T.

House Happenings

Unlike previous meetings, this one held few burning issues. President Turner could comment that the previous year had been a good one for Tennessee medicine, making allowances, of course, for the unfriendly and sometimes oppressive climate in which we must operate, and the Executive Director could look back over his first year with the satisfaction that he had done his work well. The transition had gone smoothly and under his guidance the staff had never functioned better. As the reports of the officers and the Board of Trustees are reproduced elsewhere in this issue, I'll not dwell on them here.

To say there were no burning issues, though, should certainly not lull you into complacency, into the belief that all is well, but only that debate was for the most part concluded with dispatch and with less heat than has sometimes been generated. Even the perennial die-hards, though they still died hard, generally did so gracefully and with economy of words, allowing Dr. Edwards to complete his very successful tenure as Speaker of the House without pressure and on schedule.

Resolutions and discussion reflected the continuing concern over progressive incursions by government into our medical practice. There was for example a demand for increased physician representation on HSA boards. At the moment, "health care providers," for purposes of membership on the board, includes not only physicians, dentists, and nurses, but, as "indirect providers," their spouses, county judges, and anyone else with even the remotest connection with the providing of health care. It would therefore be possible to have a board without any physician member at all. The resolution would require a guarantee of some reasonable medical representation on a board which by law must be 60% consumers of health care. (This has always seemed vague to me, and capable of several interpretations, as we are all of us consumers of health care—even *medical* care—at one time or another. But I digress.)

Although resolutions to oppose any form of national health insurance (NHI) were defeated, there was unanimous opposition to government

operated and controlled NHI, a fine but critical distinction. Reflecting its opposition to intrusion by government into the practice of medicine, the House voted down a resolution to require the use of automobile seat belts by adults as being a further intrusion by government into the lives of individuals, support for which the House considered inconsistent with its previous actions.

In view of the general opposition to the concept of mandatory acceptance of assignment for reimbursement for medical services, a word of explanation is perhaps in order as to why a resolution opposing this mechanism was rejected by the House. Although hospitalization costs are covered under Medicare, physician fees are not unless the individual elects to purchase such coverage. This coverage is purchased by Medicaid for needy individuals over 65 who otherwise would have no coverage with which to pay physician charges. Under Title XIX it is unlawful to bill for more than Medicaid will pay, so that the resolution was in violation of the federal statute. Any charge would require amendment of the Medicare-Medicaid Act which makes it unlawful to bill for the additional 20%. The resolution, under the circumstances, would have been self-defeating.

The matter of "joint practice" situations and physician assistants continues to be a thorny problem, and the House passed resolutions urging the Board of Medical Examiners to "promulgate appropriate rules and regulations . . . for the certification of physician's assistants," and rules and regulations governing physician supervision of "medical services rendered by physician extenders in joint practice settings," a task the Board finds onerous.

PSRO and the revised AMA Code of Ethics came under fire, and several resolutions on cost containment were considered. Opposition was expressed toward extension of PSRO to include outpatient care and toward any intrusion of agents of government into the offices and records of private physicians. While there was general acceptance of the provisions of voluntary cost containment, the House adopted and sent to the Board for implementation a resolution mandating the dissemination of information to the public about some causes of increased costs of medical care which are related only indirectly to it, such as inflation, governmental overregulation, increased demands and expectation on the part of patients, insurance reimbursement requirements,

and also costs resulting from advances in diagnostic and therapeutic mechanisms.

Although it was recognized that some changes are needed in the Code of Ethics, the proposed new code was considered by the Judicial Council and the House not to be what is needed, and there was lack of support for it. The House requested the Judicial Council to continue studying the code and to make recommendations as to needed revisions.

It was an interesting meeting. In addition to the political aspects, and in spite of the absence this year for the first time of a general scientific session, a lot of good scientific material was presented by the specialty societies, with opportunity for everyone to broaden his knowledge and skills and at the same time pick up some CME credit. I heard only favorable comments. Complaints were almost nonexistent as meetings went smoothly amidst generally superior accommodations.

Were you there? If not, why not? See you in Memphis next April.

J.B.T.

Tongues of Men and Angels: On Being a Part of the Answer

Love is patient and kind;
Love is not jealous or conceited or proud;
Love has good manners;
It is not selfish or irritable.
Love does not keep a record of wrongs;
Love is not happy with evil,
But is happy with truth.
Love never gives up:
Its faith, hope, and patience never fail.
Love is eternal.

I Corinthians 13:4-8
(*Today's English Version*)

Elsewhere in this issue is the address given at the Medicine and Religion Breakfast of the TMA Annual Meeting by my good friend John Burkhart, M.D., whose credentials need no listing here. The topic of his address is always timely, as it has to do with being a part of the answer rather than a part of the problem. The answer, he says, is found in a loving relationship with oneself, his fellowman, and his God, emulating the One Who was Love personified. It is an excellent exhortation. As with a lot of things, though, the difficulty we have is not in not knowing what to do, but in doing what we know. Our mental hospitals are filled with people who have

broken under a load of guilt, and our Christian churches are filled with individuals who either live lives of quiet desperation and frustration in their attempt to be godly, or who as good churchmen, presidents of civic organizations, banks, medical societies, and what have you, have made peace with themselves by saying, "Look what I've done. I can't be so bad. I may not be as good as Tom, but I'm better than Dick and just as good as Harry." Many though have a sneaking suspicion that there ought to be more, especially if they see themselves in the world I described in an editorial last month.

Our failure to live as we would like, or worse still to fail to perceive we are not living as we would like, has spiritual roots. Man is a single unit made up of a physical side, which comprises the body and soul (what the Bible refers to as "the flesh") and a spiritual side. The soul includes the mind—reason—and the emotions, which are sometimes wrongly considered spiritual. The extreme posture is to fail—or refuse—to recognize that man is a spiritual being. Or if we do recognize it, to act as if our body belongs to us and our spirit (we generally say "soul") belongs to God—maybe. We feed the spirit (soul), which is God's, on Sunday, which is also God's, and the body the rest of the time. (Those are ours!)

That dichotomy leads man into all sorts of traps. I was in high school and college at the time of Hitler's rise in Germany. What went on over there—what little we knew about it—was pretty much ignored, at least by me and my schoolmates, most of us theoretically Christians, but some were Jews, too. It was pretty far away, and we were otherwise occupied. Put briefly, and oversimplified, the Jews were considered Christ-killers by the Germans—nominally Christians—who then themselves became Jew-killers, directly or indirectly. In fact, however, under the proper circumstances, men (and I use the term generically) are both God-killers and man-killers. The crucifixion of Jesus and the Nazi Holocaust are simply specific instances of a general situation common to man, with which history is replete. It comes of man following his natural bent. What he needs is to be Spirit-directed.

Man becomes Spirit-directed by turning his life and himself over to God. God has given man free-will, so that God's only property, insofar as man is concerned, is those lives voluntarily given over to Him. We are told (Ephesians 2:10) that before the foundation of the world God pre-

pared good works for each of us "that we should walk in them." We can walk in them only as we are controlled by His Spirit. Otherwise we work our own works—which may indeed be "good works," though not necessarily *His* good works. The Bible says they will not survive (I Corinthians 3:12-15).

If God is sovereign, then nothing can happen to His property that He does not allow, and because He desires only good for us, we learn to trust Him that whatever happens is to teach us something, to make us better stewards, until we finally become able to thank Him *for* (Ephesians 5:20) everything. After all, we are told that Jesus, "though He were a son, yet learned He obedience through the things He suffered." (Hebrews 5:8).

If you have stayed with me this far, I have to conclude either that you agree with me, that you were just curious to see what I was going to say, or that as you read about love in the opening quotation (a little less "pretty" but a lot more specific than the *King James Version*) you didn't see as much of that kind of love in yourself as you would like, the kind which John Burkhart said would make you a part of the answer, and that perhaps you'd like to. If you don't believe the Bible, ask God to show you if it's true. If you don't believe in God, or that He cares about you, ask Him to show you if He's real and loves you. If you think there may be something more, it can't hurt to try God.

That is the real road to mental health.

J.B.T.



Mammography Indications

To the Editor:

Having just returned from the National Conference On Breast Cancer in San Francisco, I felt the need to respond to the article in the January, 1978 issue of the *Journal of the Tennessee Medical Association*, written by J. Lucian Davis, M.D., entitled "The Role of Mammography in the Clinical Management of Diseases of the Breast." The National Conference on Breast Cancer is jointly sponsored by the American College of Radiology and

the American Cancer Society. The great majority of the attendees at the meeting were nonradiologists. They consisted of general surgeons, plastic surgeons, gynecologists and pathologists. It was generally agreed by all those voicing their opinions at this meeting that the controversy surrounding mammography has caused infinitely more harm than good. Although the articles which provoked the controversy were concerned with carcinogenesis in women over 50 only, the number of patients failing to appear for appointments at the breast cancer demonstration projects throughout the country was greater in the under 50 age group than in the over 50 age group. Dr. Davis' statement "the role of mammography in the routine screening of asymptomatic women is at present a justifiably controversial subject," merely serves to increase the confusion. There has not been controversy regarding the screening of women over the age of 50 and unfortunately this has not been clearly understood by many physicians and most patients.

Dr. Davis states "it can therefore be said that mammography has no place in the evaluation of clinically palpable, discrete masses. An exception to this may be patients over 45 years of age who are undergoing breast biopsy for a palpable lesion, in whom mammography may be used to evaluate the presence of clinically occult lesions which could be biopsied at the same time the palpable mass is excised." Rather than "this may be an exception," it would be better stated that this is a primary indication for mammography. Having breast carcinoma is probably the most important risk factor in the development of breast carcinoma on the opposite side. Even the demonstration projects have allowed screening of women over the age of 35 who have had previous breast cancer. It must be assumed that the overwhelming majority of breast biopsies performed for a dominant mass, even in younger women, are performed for the purpose of excluding the possibility of breast carcinoma. Knowing these facts, it seems inappropriate to exclude almost any woman over 35 from preoperative mammography.

Mammography at present is the only known examination, short of biopsy, which can identify non-palpable breast carcinoma. In a situation where breast carcinoma is a serious clinical consideration, the question to be asked is, "why not do mammography?" Two possible answers come to mind. They are (1) cost and (2) radiation carcinogenesis. The problem of cost is quite complex and must be considered on both an individual basis and as part of the larger picture, "the total cost of medical care." This problem cannot be adequately discussed in this brief letter. The problem of carcinogenesis has been previously discussed in this Journal (January, 1977). The arguments are even stronger now than they were then. With equipment advances and more accurate midline breast tissue dosimetry calculations, the benefits of mammography outweigh the risks. This is certainly true for women over 40 and possibly even for younger women, especially those in whom the possibility of breast cancer is suspected.

In a patient with clinical breast disease the risk of a single mammogram is so minimal that I believe it can be ignored.

In summary, just as one would not treat chest disease without a chest x-ray or treat vascular occlusive disease without an appropriate arteriogram, breast disease should not be treated without a mammogram.

BURTON SILBERT, M.D.
Department of Radiology
Park View Hospital
Nashville, TN 37203



Orin Daniel Butterick, Jr., age 54. Died April 29, 1978. Graduate of University of Tennessee School of Medicine. Member of Memphis-Shelby County Medical Society.

Chester L. Lassiter, age 88. Died April 20, 1978. Graduate of Jefferson Medical College. Member of Chattanooga-Hamilton County Medical Society.

Jacob R. Pierce, age 90. Died May 8, 1978. Graduate of Lincoln Memorial University (University of Tennessee School of Medicine). Member of Sullivan-Johnson County Medical Society.

Alvin E. Smith, age 59. Died April 21, 1978. Graduate of University of Tennessee School of Medicine. Member of Memphis-Shelby County Medical Society.

Samuel Lewis Wadley, age 90. Died April 12, 1978. Graduate of College of Physicians and Surgeons (University of Tennessee School of Medicine). Member of Memphis-Shelby County Medical Society.



The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY

Robert K. Berglund, M.D., Chattanooga
Shawn Gazaleh, M.D., Chattanooga
Charles W. Herbert, M.D., Pikeville
Louis J. Michaelos, M.D., Chattanooga
Russell A. Jones, M.D., Chattanooga
Norman L. Ownby, M.D., South Pittsburg
Anilkumar S. Potdar, M.D., Chattanooga

COFFEE COUNTY MEDICAL SOCIETY

Gulla B. Krishna, M.D., Tullahoma

MAURY COUNTY MEDICAL SOCIETY

Earl Q. Parrott, M.D., Columbia

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY

Hagop S. Akiskal, M.D., Memphis
George I. Balas, M.D., Memphis
Steven W. Chamberlain, M.D., Memphis
Diane W. Crocker, M.D., Memphis
Lee R. Crowe, Jr., M.D., Memphis
Loren A. Crown, M.D., Memphis
Michael H. DeShazo, M.D., Memphis
Nancy C. H. Duckworth, M.D., Memphis
Ricardo R. Fuste, M.D., Memphis
John Q. Gayden, M.D., Memphis
Henry S. Gindt, M.D., Memphis
William J. Gorline, M.D., Memphis
Robert E. Gold, M.D., Memphis
Charles W. Harlan, M.D., Memphis
Michael D. Hellman, M.D., Memphis
Carl W. Huff, M.D., Memphis
Charles L. Jarrett, M.D., Memphis
Robert R. Jones, M.D., Memphis
Joe R. Krisle, Jr., M.D., Memphis
James W. Langston, M.D., Memphis
Robert E. Laster, M.D., Memphis
Robert W. Luther, M.D., Memphis
Jose Marin-Garcia, M.D., Memphis
Chandramonhan G. Mudaliar, M.D., Memphis
Harvey B. Niell, M.D., Memphis
Ralph Rabkin, M.D., Memphis
Jorge E. Salazar, M.D., Memphis
Harry I. Schaffer, M.D., Memphis
Sidney M. Simpkins, M.D., Memphis
Ray E. Stahl, Jr., M.D., Memphis
Terry L. Thompson, M.D., Memphis
Gary F. Trew, M.D., Memphis
Dennis K. Wentz, M.D., Memphis
Robert A. Wiener, M.D., Memphis

MONTGOMERY COUNTY MEDICAL SOCIETY

Terry G. Peacher, M.D., Clarksville
N. B. Self, M.D., Clarksville

NASHVILLE-DAVIDSON COUNTY MEDICAL SOCIETY

Ernest L. Coburn, M.D., Nashville
Carla M. Davis, M.D., Nashville
Anh Huu Dao, M.D., Nashville
Stephen S. Feman, M.D., Nashville
Robert B. Gaston, Jr., M.D., Donelson
Alfred C. Hanscom, M.D., Madison
Jayakumar Reddy Kambam, M.D., Nashville
Jerry S. Sutton, M.D., Nashville
Marion L. Weinstein, M.D., Nashville

NORTHWEST TENNESSEE ACADEMY OF MEDICINE

David C. Cook, M.D., Union City

SUMNER COUNTY MEDICAL SOCIETY

N. K. Bhagavan, M.D., Gallatin

J. R. Blackshear, M.D., Gallatin

WARREN COUNTY MEDICAL SOCIETY

G. Jackson Jacobs, M.D., McMinnville

personal news

William H. Blackburn, M.D., Camden, was recently elected president of this state's largest conservation group, the Tennessee Conservation League.

H. H. Barham, M.D., Bolivar, has been installed as president of the West Tennessee Consolidated Medical Society.

Robert Spalding, M.D., Chattanooga, has been named president-elect of the Tennessee Psychiatric Association and will assume the presidency in April 1979.

Gene H. Stollerman, M.D., Memphis, professor and chairman of the Department of Medicine at the College of Medicine at UTCHS, has been named a regent of the American College of Physicians. He is one of 18 regents who direct the affairs of the College and its more than 30,000 specialists in internal medicine and all of its subspecialties.

national news

From the AMA's Office in Washington, D.C.

President Pushes Cost Cap

In a major national address President Carter urged voluntary restraint of labor and management to curb wage and price increases. Though rejecting mandatory controls for all other segments of the economy he urged passage of his hospital cost containment bill that would place a lid on hospital revenue increases.

The President said that daily hospital costs have jumped from \$15 in 1950 to more than \$288 today. "And physician fees have gone up 75% faster than other consumer prices."

In the immediate wake of the President's speech, Health, Education and Welfare Secretary Joseph Califano announced a number of belt-tightening measures, primarily the importance to the administration of passing hospital revenue cap legislation.

The HEW secretary said he expects Congress will approve his plan to "cap" hospital revenues 9% a year. He also said that Sens. Edward Kennedy

(D-Mass.) and Herman Talmadge (D-Ga.), chairmen of the two Senate health subcommittees, have apparently reached agreement after a long impasse to bring the proposal to the Senate floor this year.

Subsequently, the President met with the chairman of a House health subcommittee, Rep. Dan Rostenkowski (D-Ill.), to stress the importance of limiting hospital fees.

Afterward, Rep. Rostenkowski told reporters that Congress has a better chance of approving the hospital cost containment proposal than anything else in President Carter's legislative package.

Congressional leaders, including Robert C. Byrd (D-W.Va.), the Senate majority leader, indicated they would push hospital cost containment as a major bill this session.

The most important regulatory measure in Secretary Califano's belt-tightening list will limit Medicare payment for laboratory tests and medical equipment "to the lowest price that is widely available for the same quality in a particular community, instead of paying on the basis of average charges or even higher ones."

The initial limit will apply to the 12 most common lab tests and to hospital beds and wheelchairs purchased for Medicare patients. The limits are to be extended to other tests and equipment later.

Other initiatives announced by Califano included the following:

- New Medicare computer screening techniques to flag medically unnecessary health care services.
- Specific goals for length of Medicare stays and use of tests to be determined by Professional Standards Review Organizations.
- Acceleration of the program to secure second opinions in Medicare surgery cases.
- Revised regulations to encourage hospitals to pool resources and share services.
- An increase in the number of Medicare contracts put up for competitive bidding.
- A regulation to require states to give 60 days' notice of any proposed increase in Medicaid fees.

Califano also said he is writing the nation's governors to ask them to promote the substitution of generic drugs and to encourage enrollment in health maintenance organizations by state employees and Medicaid beneficiaries.

The HEW secretary told reporters that "the medical profession itself has begun to recognize the need to control the increases in health care costs." He said physicians "are pilots in this airplane of medicine," and are increasingly ready to respond to cost-cutting efforts because of the realization that the alternative might be federal controls.

The National Commission on the Cost of Medical Care established by the American Medical Association issued recommendations on effective delivery of medical services that "deserve prompt action," Califano said.

The Voluntary Effort by the AMA, American Hospital Association, and Federation of American Hospitals, was criticized by Califano, who said it "doesn't look to me as if there is much voluntary

restraint. . .” However, he indicated that, if necessary, the administration would support a bill in Congress by Rep. Rostenkowski that would afford the Voluntary Effort an opportunity to prove itself.

And Labor Pushes NHI

Labor leaders and Senator Kennedy are again calling upon the White House with redrafted versions of their brand of national health insurance (NHI) in search of some sort of face-saving compromise. And the President, though his welcome mat is out, is reportedly doing his best to convince labor to draw back a bit from its original insistence on a wide-sweeping plan and go along with an affordable approach that the Congress might buy.

Labor has told the President it is willing to abandon provisions of its Health Security Act under which the federal government would handle all of the financing for NHI, eliminating private health insurance. The current discussions center on how far labor is willing to retreat.

President Carter needs labor's support if the administration's NHI program stands any chance at all of clearing Congress.

HEW is the so-called “lead-agency” in developing the administration's NHI measure. HEW Secretary Califano and his health planning staffers are cool toward the Kennedy-labor approach to NHI and are viewed with some suspicion and hostility by the labor chiefs.

However, the White House talks on the issue have gone smoothly. A big hitch has been HEW's opposition to “prospective budgeting,” the financing of health care funds in advance, a cornerstone of labor's Health Security Act aimed at controlling costs.

So far, the participants appear to be leaning toward an “opt out” plan under which the federal government would establish an NHI program, including Medicare and Medicaid, with the private sector allowed to construct private health insurance packages that meet federal standards.

Among those attending a recent White House session on NHI with President Carter were Kennedy; AFL-CIO President George Meany; United Auto Workers President Douglas Fraser; Secretary Califano; White House health aide Peter Bourne, M.D.; and Stuart Eizenstat, White House domestic programs aide.

Agreement was reported on the questions of universality, timing and the need for NHI.

Areas of disagreement focused on administration, overall cost, and how to finance the plan.

Although the President and White House staff were pleased with the general tone of the discussion, they apparently felt labor must shift its position even more since the administration is vitally interested in submitting a legislative proposal that “represents a consensus and is salable and affordable,” said one participant.

The meeting concluded with an understanding that Kennedy and the labor leaders would go back and rethink their positions and submit a revised proposal at a future meeting with the President before the administration announces its NHI principles.

Areas for future discussion include:

- Administration—participation of private insurance companies. Labor has shifted slightly from its previous position of “no role” for the private insurance sector to a limited underwriting role with rigid federal regulation. The administration feels this shift is not enough and has suggested that labor present some alternatives for further discussion.

- Benefit package—there appears to be some progress in this area but the White House still believes labor's package is too costly. Labor insists on “first dollar coverage,” but the White House staff would like an alternative incorporating some consumer cost-sharing through coinsurance and/or deductibles.

- Cost containment—labor continues to favor an NHI budget with fixed “caps” administered at the federal level. The White House noted the political and administrative difficulties of such an approach and wants to discuss alternatives such as prospective reimbursement.

- Financing—apparent agreement was reached that Social Security financing cannot be used for NHI. But no agreement has been reached on how best to finance an NHI plan.

The President will announce his NHI principles shortly. A “package of NHI specifications” (not in bill form) will be forwarded to the Congress by August so legislative hearings can be scheduled. Kennedy told reporters he plans hearings by his health subcommittee this summer.

While Bureaucrats Push to Control Drug Rx

Vital decision-making authority on drug treatment of patients would be transferred from the practicing physician to bureaucrats in Washington, under legislation before Congress, the AMA has warned.

Testifying on sweeping bills to change the nation's drug laws, the AMA told Sen. Kennedy's health subcommittee that the administration bill “improperly crosses the line which should separate the regulation of drugs to assure their safety and efficacy and the regulation of the practice of medicine through the regulation of drugs.”

William C. Felch, M.D., chairman of AMA's Council on Legislation, testified that provisions in the measure “would allow medical decisions to be made by a government agency.” Dr. Felch pointed to provisions allowing HEW to impose dispensing and distributing conditions on drug use; requirements for patient information labeling for nearly all

drugs even against physicians' recommendations; and authority for the government to decide such factors as relative efficacy in comparison with other treatment modes, intentional abuse potential and use for nonapproved purposes.

"We believe that the patients of this country want their treatment decisions to be made by physicians of their choice—physicians who have the responsibility for the individual patient's care—and not by a federal bureaucracy," Dr. Felch testified.

Referring to the same provisions, William R. Barclay, M.D., AMA group vice president for scientific publications and editor-in-chief of the *JAMA*, told the human resources subcommittee, "We are concerned that detailed patient labeling could encourage inappropriate self-medication by patients for themselves or for members of their families for conditions that should appropriately be under a physician's care."

Dr. Barclay also criticized the proposed monograph plan under which all drugs would be subject to both a public monograph and a private marketing license.

A drug innovator granted a monograph would be licensed to produce the drug. Subsequently, manufacturers of this drug would no longer be required to perform independent clinical research and submit data establishing the safety and efficacy of the product.

Dr. Barclay said such a system has never been tested in this country and carries the potential for abuse caused by the increased centralization of authority in the Food and Drug Administration.

Rather than convert the entire drug approval process to a monograph system, he said, "a better approach would be to make judicious amendments to existing law to eliminate duplicative research requirements and to conduct a demonstration or pilot test of a monograph system without the authority to impose inappropriate controls on drug use. . ."

New Medicare List Out

The government's most recent list of Medicare payments to all physicians has been made public. But digging out the information will be tough.

HEW contends the Freedom of Information laws compel the release of the Medicare data to the public. Last year, HEW issued names and payment only for physicians collecting \$100,000 or more from Medicare revenues. This year, all totals, however small, of every physician who treated a Medicare patient, whether on assignment or not, will be listed.

Following the debacle of last year when the list was replete with errors, HEW and the carriers have made strenuous efforts to get the figures right this time, sending physicians in advance the totals and asking them to verify them. The project is estimated to cost about \$1 million.

Some 274,000 physicians' names are on the list plus nursing homes, clinics, dentists, and chiroprac-

tors, adding up to more than 300,000 entries. Only two master lists will be available—one in the office of Secretary Califano, the other at Social Security's headquarters in Baltimore, Md. The master lists—in alphabetical order—comprise volumes a number of feet thick.

HEW regional offices will refer public inquiries to the appropriate carriers for Medicare which must make their lists public to anyone who asks. Copies will cost 10 cents a page.

The press will have its work cut out in compiling news stories, since it will necessitate pouring over lengthy lists and in many cases checking with more than one carrier.

The AMA had urged HEW to abandon the publicity effort, declaring ". . . it would seem that an administration with such a strong public commitment to cost-effective government would seriously question and find lacking the value of such an undertaking."

The AMA documented a 65% error rate in a sampling of last year's list. Secretary Califano later apologized. The general accounting office made a study and reported the list was riddled with errors. But Secretary Califano persisted and the new list has now made its 1978 debut.

NIH To Monitor Medical Research And Technology

The AMA has raised a warning flag for legislation aimed at centralizing government evaluation of medical technology.

"Authority to centralize the evaluation of technology, using such factors as cost effectiveness . . . not only could lead to a stifling of research and other creative initiatives . . . but also could serve to regiment and limit physician options in providing treatment to patients on an individualized basis," said William Felch, M.D., chairman of the AMA Council on Legislation.

Dr. Felch made the statement in testimony prepared for the House commerce health subcommittee which is considering three bills dealing with medical technology research.

One would establish the National Institutes of Health Care Research as an independent research entity parallel to the National Institutes of Health (NIH). The Institute would conduct research into health care delivery. The bill also would establish a new National Center for Evaluation of Medical Technology.

Another bill would establish, within NIH, a Center for the Evaluation of Medical Practice. This Center would conduct and support research on the evaluation of the effectiveness of medical practice, including evaluations of diagnostic and case finding techniques, therapeutic procedures, and the appropriate use of facilities, equipment and technology.

The final bill would extend and expand federal activities relating to health services research and the

collection of health statistics. Dr. Felch said that "effective medical treatment can only be provided when the physician's professional judgment is not preempted by restrictive guidelines, regulations or legislation."

"The potential for an adversarial type of review at the early stages of technology development could cut off many initiatives that would not appear at the outset to be promising when based upon a cost-benefit analysis—often the very types of initiatives that lead to serendipitous discoveries of lifesaving techniques," he testified. "Any action that could diminish the effectiveness of our biomedical research efforts should not be enacted."

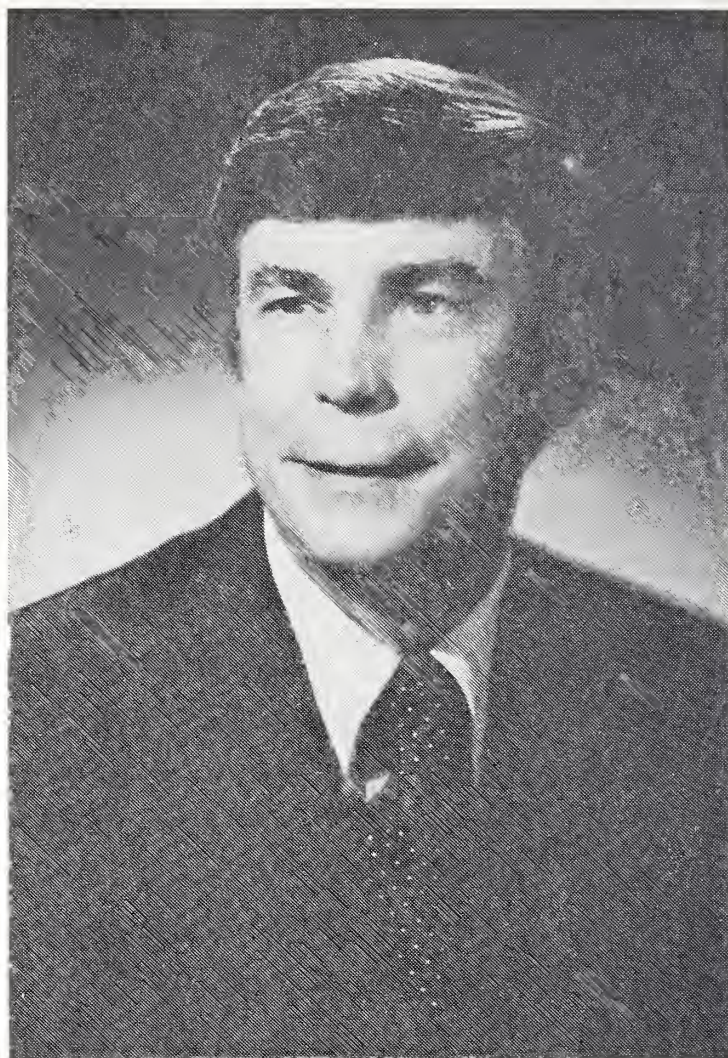
The AMA official said the legislation implies that the assessment of medical technology is not adequate and that the dissemination of the results of research is not widespread. "Such is not the case and overlooks the fact that information about new research discoveries is widely disseminated through both the scientific and lay media and that any new technological development is subject to regular comment and criticism by both research authorities and experts in the social and other sciences," the physician said.

announcements

CALENDAR OF MEETINGS NATIONAL 1978

- | | |
|--------------------|--|
| June 27-30 | Society of Nuclear Medicine, Disneyland Hotel, Anaheim, California |
| June 29-
July 1 | National Conference on Nutrition in Cancer, Washington Plaza Hotel, Seattle |
| July 21-25 | American Association for Clinical Immunology and Allergy, Newporter Inn, Newport Beach, California |
| July 30-
Aug. 3 | National Medical Association, Hilton Hotel, Washington, D.C. |
| Aug. 3-6 | International Doctors in Alcoholics Anonymous, Sheraton-Southfield Hotel, Southfield, Michigan |
| Aug. 6-8 | American Association of Diabetes Educators, Chase-Park Plaza, St. Louis |
| Aug. 10-12 | Black Hills Summer Seminar, Holiday Inn, Spearfish, South Dakota |
| Aug. 13-17 | American Society for Pharmacology and Experimental Therapeutics, University of Houston, Houston |
| Aug. 27-31 | International Society for Experimental Hematology, Chicago |

Tom Wilkerson Named TMA Field Representative



The Tennessee Medical Association announces the employment of Thomas Wilkerson as executive assistant and field representative for the Association. He comes to the TMA from the Public Affairs Department of Caterpillar Tractor Co., Peoria, Ill.

A native of Boaz, Ala., Wilkerson, age 39, received his B.A. degree in Humanities from the University of South Florida in 1970. From 1961 to 1971, he was a journalist for the *Ocala (Fla.) Star-Banner*, the *Orlando (Fla.) Sentinel*, the *Gadsden (Ala.) Times*, and the *Tampa (Fla.) Tribune*. Prior to joining Caterpillar in 1976, he served as manager of internal communications/public relations officer for Barnett Banks of Florida, Inc., in Jacksonville.

Wilkerson is the founding president of the Jacksonville, Fla., Chapter of the University of South Florida Alumni Association. In 1976, he was awarded the Valley Forge Honor Certificate Award of the Freedoms Foundation at Valley Forge, Pa., and the Lantern Award of the Southern Public Relations Federation. He is a member of Sigma Delta Chi professional journalism society and various public relations associations.

Wilkerson and his wife, Betty, a native of Pike County, Ky., have three sons, Gregory, age 11, Matthew, age 8, and Jacob, age 3.

The continuing medical education accreditation program of the TMA has full approval by the Liaison Committee on Continuing Medical Education. An accredited institution or organization may designate for Category 1 credit toward the AMA Physician's Recognition Award those CME activities that meet appropriate guidelines. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Ave., Nashville, TN 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

IN TENNESSEE

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman, can plan an individualized program of one to four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, ward rounds, learning individual procedures, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

Participating Departments and Divisions

Allergy & Immunology	Samuel Marney, M.D.
Anesthesiology	Bradley E. Smith, M.D.
Cardiology	Gottlieb C. Friesinger, III, M.D.
Chest Diseases	James D. Snell, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Dermatology	Lloyd King, M.D.
Diabetes	Oscar B. Crofford, M.D.
Endocrinology	David Rabin, M.D.
	David N. Orth, M.D.
Gastroenterology	Steven Schenker, M.D.
General Internal Medicine	W. Anderson Spickard, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.
Medicine	Grant W. Liddle, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Oncology	Robert Oldham, M.D.
Orthopedics	Paul W. Griffin, M.D.
Pathology	William H. Hartmann, M.D.
Pediatrics	David T. Karzon, M.D.

Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Everette James, Jr., Sc.M., J.D., M.D.
Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sergeant, M.D.
Surgery	
Cancer Chemotherapy	Vernon H. Reynolds, M.D.
General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neill, M.D.
Plastic	John B. Lynch, M.D.
Renal Transplantation	Robert E. Richie, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.

Eligibility: All licensed physicians are eligible.

Administrative Fee: \$200.00 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1) and American Academy of Family Physician's Continuing Education accreditation.

Application: For further information and application, contact: Paul E. Slaton, M.D., Director, Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

Continuing Education Schedule 1978

June 25-30	Pharmacokinetics
July 6-9	Contemporary Clinical Neurology— Hilton Head, S.C. (16 hours)
July 10-12	Diagnostic Sonography Update: 1978 (20 hours)
Sept. 15-16	9th Annual Pediatric Symposium— Recent Advances in Therapy and Pre- vention of Infectious Diseases
Sept. 21-22	Postgraduate Course in Allergy
Sept. 27-30	Symposium on Diagnostic Imaging
Fall, 1978	Parenteral Alimentation
Fall, 1978	Update in Management of Urologic Tumors

For information contact: Vanderbilt Continuing Education, 305 Medical Arts Building, Nashville, TN 37212. Tel. (615) 322-2716.

MEHARRY MEDICAL COLLEGE SCHOOL OF MEDICINE

Extended Continuing Education Program

Arrangements have been made with the following services and departments in the medical school to allow practicing physicians to participate in that service's activities for a period of one to four weeks. This program provides an opportunity for physicians to study in depth for a specified period. The schedule of activities is individualized in re-

sponse to the physician's request by the participating department. The experience includes conferences, ward rounds, audiovisual materials and contact with patients, residents and faculty.

Participating Departments

Anesthesiology	Ramon S. Harris, M.D.
Family Practice	John Arradondo, M.D.
Internal Medicine	
Cardiology	John Thomas, M.D. Kermit R. Brown, M.D. Qamar A. Kahn, M.D.
Chest Disease	Joseph M. Stinson, M.D. Paul A. Talley, M.D. Edward A. Mays, M.D.
Dermatology	Thomas W. Johnson, M.D. David Horowitz, M.D.
Gastroenterology	Ludwald O. P. Perry, M.D. Buntwal M. Somayaji, M.D.
General Medicine	Edward A. Mays, M.D.
Hematology/Oncology	Robert S. Rhodes, M.D. Robert S. Hardy, M.D.
Neurology	Calvin L. Calhoun, Sr., M.D. Gregory Samaras, M.D.
Obstetrics & Gynecology	Henry W. Foster, M.D.
Gynecological Endocrinology	Elwyn M. Grimes, M.D.
Ophthalmology	Axel C. Hansen, M.D.
Orthopedics	Wallace T. Dooley, M.D.
Pathology	Louis D. Green, M.D. John C. Ashhurst, M.D.
Pediatrics	E. Perry Crump, M.D.
Surgery	
General	Louis J. Bernard, M.D.
Neurological	Charles E. Brown, M.D.
Thoracic and Cardiovascular	David B. Todd, M.D. Ira D. Thompson, M.D.
Urology	Marcelle R. Hamberg, M.D.

Fee: \$100 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1), American Academy of Family Physicians Continuing Education Accreditation and Continuing Education Units by Meharry Medical College.

Application: For further information contact Frank A. Perry, M.D., Director, Continuing Education, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

Continuing Education Schedule

October Cleve Ewell Hematology Seminar (6 hours)

For information contact Frank A. Perry, M.D., Director of CME, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

UNIVERSITY OF TENNESSEE CENTER FOR THE HEALTH SCIENCES

Continuing Education Schedule 1978-79

This comprehensive listing of UTCHS courses includes programs of the Chattanooga, Knoxville, and Memphis units. The codes (C), (K), and (M) indicate the continuing education unit handling the arrangements for a particular program.

Aug. 9 (K) Family Practice Conference
Sept. 13-15 (M) Cardiac Auscultations

Sept. 21-22	(M)	10th Memphis Conference on Mother, Fetus, and Newborn
Sept. 22	(C)	Dermatology for the Family Physician
Sept. 27-Oct. 11	(M)	Current Issues in Cardiology & Pulmonary Disease; EKG Interpretation (Mediterranean Cruise visiting France, Egypt, Israel and Greece)
Sept. 28-29	(C)	Current Methods in OB/GYN
Sept. 28-29	(M)	Medical and Surgical Problems (Jackson)
Oct. 4-6	(M)	Recent Advances in Pulmonary Medicine
Oct. 5-7	(C)	Diagnostic Radiology for the Primary Care Physician
Oct. 12-14	(K)	Office Ultrasound
Oct. 22-24	(K)	Cancer Concepts 1978 (Gatlinburg)
Oct. 26-27	(C)	Emergency Medicine
Oct. 26-28	(M)	Medical Alumni Day
Oct. 27-29	(K)	Tennessee Radiological Society Meeting
Nov. 17	(K)	7th Annual Internal Medicine Symposium
Nov. 30-Dec. 1	(C)	Nephrology-Urology Update
Dec. 8-9	(M)	Otolaryngology for the Primary Care Physician

1979

Jan. 24-26	(M)	Audiometric Orientation — first session
Jan. 25-26	(C)	Allergies
Feb. 7-9	(M)	Gynecologic Urology
Feb. 12-13	(M)	Practical Office Dermatology
Feb. 23-24	(C)	Gut Problems: A Clinical Approach (St. Petersburg, Florida)
Feb. 24-Mar. 2	(K)	Caribbean Cruise (Departure from New Orleans with stop in Havana)
Mar. 5-8	(C)	Diagnostic Radiology for the Primary Care Physician (Sahara Tahoe, Stateline, Nevada)
Mar. 16	(M)	Modern Approach to Hypertension
Mar. 18-24	(M)	Review Course for Family Physicians
Mar. 22-23	(C)	Orthopedics
Apr. 26-27	(C)	Pediatrics
Apr. 26-27	(M)	Lee Buring Memorial Conference
May 7-9	(M)	4th Annual Symposium on Reproductive Medicine
May 10-12	(M)	Otolaryngology for the Primary Care Physician
May 10-11	(C)	Rheumatology
May 14-18	(M)	Internal Medicine Review Course
June 4-9	(C)	Family Practice Review Course
June 6-9	(M)	Basic Electrocardiography
June 6-8	(M)	Audiometric Orientation—second session

June 9 (M) Audiometric Orientation — refresher course

June 11-14 (M) Basic Principles of Rhinoplasty
For further information about any of these courses, please contact the appropriate individuals below:

(C) Mr. LeRoy J. Pickles, Director of Continuing Medical Education, UTCHS/Clinical Education Center, 921 E. Third St., Chattanooga, TN 37403, Tel. (615) 756-3370.

(K) Dr. Harvey L. Goodman, Director of CME, UTCHS/Knoxville, Box 116, 1924 Alcoa Hwy., Knoxville, TN 37920, Tel. (615) 971-3345.

(M) Mr. Wallace Mayton, Director of Conferences, Div. of Continuing Education, UTCHS, 800 Madison Ave., Memphis, TN 38163, Tel. (901) 528-5547.

For general information about the total program, contact Dennis K. Wentz, M.D., Director of Continuing Education, Asst. Vice-Chancellor for Academic Affairs, UTCHS, 62 S. Dunlap St., Memphis, TN 38163, Tel. (901) 528-5605.

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For further information contact: Maxie C. Maulsby, Jr., M.D., Office of Continuing Medical Education, Dept. of RBT, University of Kentucky, Lexington, KY 40506.

Continuing Education Schedule 1978

Oct. 27-28 Fluid and Electrolyte Balance Made Simple—Hyatt Regency Lexington, Lexington, Ky. *Credit:* 10 hours AMA Category 1. *Fee:* \$75.

June 25-30 Ninth Family Medicine Review (Sessions I, II, and III)—Hyatt Regency Lexington, Lexington, KY. *Credit:* 50 hours AMA Category 1 and AAFP.

Aug. 13-18 and Dec. 10-15 *Fee:* \$295.

For information contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, KY 40506.

MEDICAL COLLEGE OF GEORGIA

July 31-Aug. 2 Pediatrics: Common Office Problems—Holiday Inn, Jekyll Island, Ga. *Credit:* 13-1/4 hours AMA Category 1; 13-1/2 AAFP Prescribed. *Fee:* \$140 for entire program or \$50 per day.

For information contact: Division of Continuing Education, Medical College of Georgia, Augusta, GA 30901.

DUKE UNIVERSITY MEDICAL CENTER

July 31-Aug. 5 Current Concepts in Diagnostic Radiology including Ultrasound, CT Scanning and Nuclear Medicine—Atlantic Beach, N.C. *Credit:* 30 hours AMA Category 1. *Fee:* \$200.

For information contact Robert McLelland, M.D., Radiology-Box 3808, Duke University Medical Center, Durham, NC 27710, Tel. (919) 684-4397.

OF SPECIAL INTEREST

AMERICAN COLLEGE OF PHYSICIANS

A comprehensive schedule of continuing medical education activities for a 12-month period beginning in August, 1977, includes regional meetings and postgraduate courses to be held at various locations throughout the United States and Canada.

The ACP Regional Meetings, lasting one to four days, are designed for practicing internists and physicians in related fields. They bring new developments in the basic sciences and clinical medicine from major research centers to internists who are unable to travel to medical meetings outside of their state, and also provide a vehicle for local physicians to report to their colleagues on investigative work and clinical experiences in the wide scope of subject areas included in the practice of internal medicine.

The ACP Postgraduate Courses provide the opportunity for in-depth study in fields covered by internal medicine and its subspecialties. Averaging three to five days, they are directed toward practicing physicians and are presented in association with medical schools and other teaching institutions.

For information and registration contact: Registrar, Postgraduate Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

Postgraduate Courses

June 23-26 Infectious Diseases—Winnipeg, Manitoba

July 10-12 Topics in Clinical Hematology V: Disorders of Proliferation and Maturation—Waterville, Me.

July 13-15 Topics in Clinical Oncology V: Multidisciplinary Approaches to Difficult Cancer Problems—Waterville, Me.

AMERICAN CANCER SOCIETY— NATIONAL CANCER INSTITUTE

- June 29-
July 1 National Conference on Nutrition in Cancer—Washington Plaza Hotel, Seattle. *Credit:* AMA and AAFP. *Fee:* None.
- Sept. 11-13 National Conference on the Care of the Child with Cancer—Sheraton-Boston Hotel, Boston. *Credit:* AMA and AAFP. *Fee:* None.

For information contact Sidney L. Arje, M.D., ACS-NCI, 777 Third Ave., New York, NY 10017, Tel. (212) 371-2900.

AMERICAN MEDICAL ASSOCIATION

Medical Staff Leadership Seminars—1978

- Sept. 29-30 Fairmont Hotel, New Orleans
Nov. 3-4 Eden Roc Hotel, Miami Beach
Credit: 14 hours AMA Category 1.
Fee: AMA member of medical society staff, \$150; nonmember, \$200.

For information contact AMA Department of Hospitals and Health Facilities, 535 N. Dearborn St., Chicago, IL 60610, Tel. (312) 751-6653.

INTERNATIONAL ACADEMY OF CHEST PHYSICIANS AND SURGEONS (Affiliated with the ACCP)

- July 2-7 XIII World Congress on Diseases of the Chest—Kyoto International Conference Hall, Kyoto, Japan. *Fee:* ACCP members, \$120; nonmember physicians, \$140.

For information contact Alfred Soffer, M.D., Executive Director, American College of Chest Physicians, 911 Busse Hwy., Park Ridge, IL 60068, Tel. (312) 698-2200.

THE MENNINGER FOUNDATION

Workshops for Physicians and their Families

- Aug. 13-18 Physicians and their Families: An Experience in Communication—YMCA of the Rockies, Estes Park, Colo. *Credit:* 25 hours AMA Category 1 and AAFP Prescribed. *Fee:* \$325 per family (parents and unmarried children under 21 years of age).

For information contact Erwin T. Janssen, M.D., Director of Division of Continuing Education, The Menninger Foundation, Box 829, Topeka, KS 66601, Tel. (913) 234-9566.

ESTES PARK INSTITUTE

The Estes Park Institute, a non-profit educational organization, will sponsor Hospital Medical Staff Conferences and Hospital Trustee Forums at the dates and locations below. *Credit:* 30 hours AMA Category 1 (each location). *Fee:* \$190.

- June 25-29 Oconomowoc, Wisconsin
Oct. 1-5 Pocono Manor, Pennsylvania
Nov. 12-16 Pacific Grove, California
Dec. 3-7 Clearwater Beach, Florida

For information contact Estes Park Institute, P.O. Box 400, Englewood, CO 80151, Tel. (303) 761-7709.

BETH ISRAEL HOSPITAL

- Aug. 13-18 Aspen Mushroom Conference (Identification of edible, poisonous, and hallucinogenic mushrooms; treatment of mushroom poisoning; microscopy)—Wildwood Inn, Snowmass-at-Aspen, Colo. *Credit:* AMA Category 1.

For information contact Beth Israel Hospital, 1601 Lowell Blvd., Denver, CO 80204, Tel. (303) 825-2190, ext. 359.

BOWMAN GRAY SCHOOL OF MEDICINE

Seminar in Ultrasound

- Aug. 21-23 Advanced Seminar on Ultrasound of the Abdomen and Obstetrics (co-sponsored by Orlando Regional Medical Center)—Dutch Inn, Lake Buena Vista, Fla. *Fee:* physicians \$200; residents and sonographers \$125.

For information contact J. F. Martin, Director, Center for Medical Ultrasound, Bowman Gray School of Medicine, Winston-Salem, NC 27103.

UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE

- Sept. 17-22 Annual Otolaryngologic Assembly of 1978—Eye and Ear Infirmary of the University of Illinois Hospital, Chicago. Presented by the Abraham Lincoln School of Medicine, University of Illinois at the Medical Center.

For information contact Department of Otolaryngology, Illinois Eye and Ear Infirmary, 1855 W. Taylor, Chicago, IL 60612.

NETWORK FOR CONTINUING MEDICAL EDUCATION

Schedule for Upcoming Programs

- June 12-
July 9 Blood Components and their Application—with Harold A. Oberman, M.D., and John A. Penner, M.D., University of Michigan Medical Center, Ann Arbor. (1 hour AAFP Prescribed credit)
- July 10-
Aug. 6 The Five Phases of Acute Myocardial Infarction—with J. O'Neal Humphries, M.D., and Bernadine H. Bulkley, M.D., John Hopkins Hospital and School of Medicine, Baltimore (1 hour AAFP Prescribed credit)

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More Studies Urged On Injury Problem

An injury is no accident, a midwestern preventive medicine specialist declared in voicing an appeal for greater efforts toward understanding and preventing injuries.

Theodore C. Doege, M.D., head of the Department of Environmental, Public, and Occupational Health of the American Medical Association, urged that, "It is time for medicine to dispose of the idea of 'accident' and 'accidental injury,' so that recent halting steps in understanding the injury problem can continue." Dr. Doege is associate professor of epidemiology at the School of Public Health of the University of Illinois at the Medical Center, Chicago.

For persons from 1 to 44 years of age, injuries are the most common cause of death. Injuries often are predictable. A youthful male intoxicated motorist driving without fastened seatbelt late at night is ripe for injury.

There is much that can be done to remove the

element of risk from the potential injury situation. The lapbelt-shoulder harness prevents many injuries, as does the limited access mall that separates pedestrians from motor vehicles.

The scope of the injury problem by age group is great, ranging from death by poisoning in the infant to broken bones caused by falls in the elderly, and includes the environments of water, land, and air. The field of injury research is wide open to medical science, in that there are few investigators in the field, Dr. Doege said.

Jimsonweed "High" Inspires Aboriginal Cave Artists

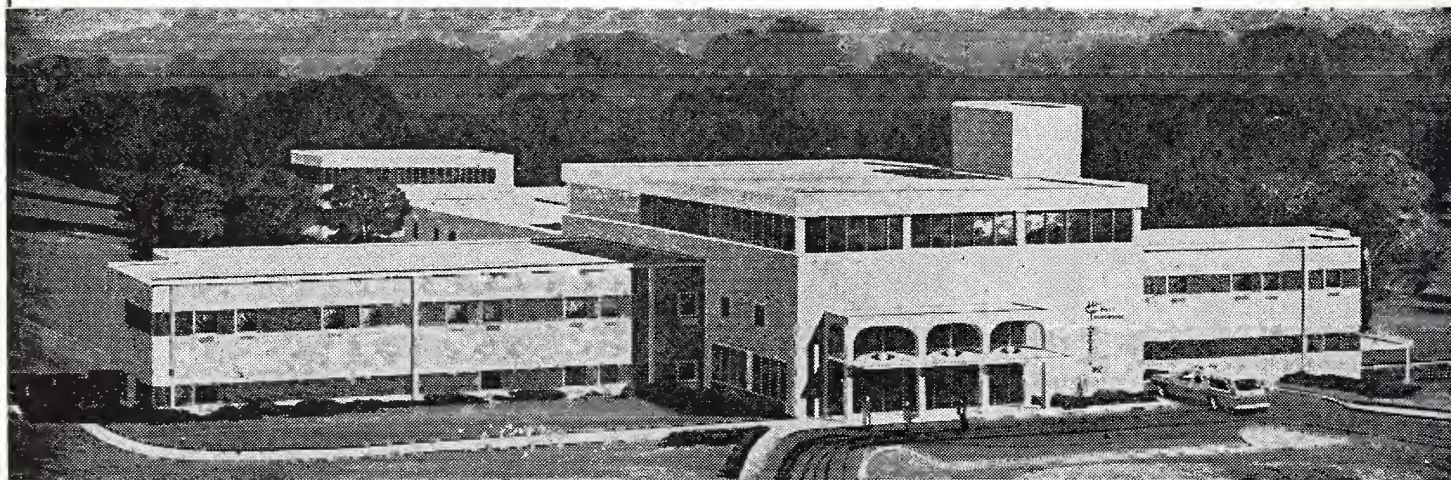
Some of the aboriginal rock paintings by North American Indians might have been produced by shamans who were high on jimsonweed or mescal beans. A New York City pathologist who has made a study of North American Indian rock art, Klaus F. Wellmann, M.D., says that the designs of rock paintings in California and in Texas are similar to designs visualized during a trance brought on by the hallucinogenic plants.

Designs studied included pictographs of the Chumash Indians, found in small sandstone caves in the coastal mountains near Santa Barbara, Calif., and the rock drawings of the Yokuts of the foothills of the southern Sierra Nevada. The drawings are a mixture of animate creatures and abstract elements

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that produced a dream-like sense of the supernatural and the mysterious.

Jimsonweed grows wild in much of southern California. The early Indians ground roots, stems and leaves and soaked them in water to produce a brew. In mild doses, the drink induced visions. In larger doses it produced coma and was used by the Indians as an anesthetic when setting fractures or treating wounds.

In the lower Pecos River region of Texas and the adjacent portion of the Mexican state of Coahuila are more than 40 shelters with pictographs probably dating back to before the time of Christ. The multicolored paintings form sizable panels that decorate the walls and often parts of the ceiling of rock shelters. These also indicated that the artists may have been putting down the visions they saw after eating mescal beans.

The mescal bean is an evergreen shrub that grows in profusion in the lower Pecos River region as well as in other parts of Texas and in northeastern Mexico. In large doses it can cause death. There are striking parallels between some of the objects depicted in these paintings and in the trappings associated with the mescal bean cult as practiced by tribes of the central and southern Great Plains during fairly recent times.

The article is adapted from a forthcoming book by Dr. Wellmann, *A Survey of North American Indian Rock Art*.

Scientific Test Proves Generic Drugs Not Equal

Once again a scientific research project has shown that different brands of the same drug do not always produce the same results in individual patients.

A research group at the Medical College of Virginia tested two different brands of tetracycline. Each was a dose of 250 mg. One was packaged in a capsule and the other in a tablet. They had been certified as producing identical results by the Food and Drug Administration.

In a report in the May 5 issue of *JAMA*, Dr. John H. Wood and colleagues declare that the tablet purchased from the lowest bidder was inferior to the more expensive capsule product in raising blood and urine levels of the potent antibiotic in test volunteers.

The two were not the same, and a doctor prescribing by generic name only would not know whether his patient has received the more beneficial drug or not.

The use of 250 mg four times a day is a standard dosage that should provide high enough levels of the antibiotic in the blood to cope with most infections. Tetracycline is the best drug for rickettsial infections and may be the best alternate drug for treatment of micoplasma and gonococcal infections, says Dr. Wood.

But, if the doctor writes a prescription for simply tetracycline, rather than specifying the brand packaged in the capsule, the patient may not gain sufficient protection to overcome the infection, he says.

"Present batch certification (by the FDA) of tetracycline tablets does not ensure equivalency in performance relative to the innovator capsule product," he declares.

In an accompanying editorial, Louis Lasagna, M.D., of the University of Rochester School of Medicine and Dentistry, Rochester, N.Y. declares:

"Politicians, consumers, and third-party payers are all interested in saving money on drugs, although drug costs represent only 10% of the national health bill.

"Passions run high about generic substitution. The debate has not been helped by two flimflams perpetrated on the public—the notion that generic prescribing invariably leads to savings for the consumer, and the readiness with which everyone ignores the importance of the pharmacist in determining prescription prices.

"It is a cruel hoax on the sick, rich or poor, to save money at the expense of good treatment. It is appalling to find proponents of substitution bills and the maximum allowable cost plan so shamefully ready to give assurances to the public about interchangeability of generic and brand versions that no knowledgeable scientist in his right mind would give.

"The article by Wood et al is the latest scientific study to show how pathetically misplaced our faith can be in regard to marketed drugs. Their paper correctly concludes that the tetracyclines tested are not interchangeable and that present batch certification of antibiotics by the FDA cannot ensure equivalency of performance.

"The lesson is obvious, but will the politicians and bureaucrats be guided by scientific fact or by cynical political and economic expediency? The public deserves candor and straight talk. Cheap drugs are not necessarily good medicine."

Southeast Asia Refugees and Vets May Harbor Exotic Infections

Refugees from Southeast Asia and Americans who served in that area may be harboring exotic infections says a report in the May 5 issue of *JAMA*. Southeast Asia affords exposure to infectious diseases that are uncommon or unknown in untraveled North Americans. Some of these are chronic infections of bacterial origin, such as leprosy, tuberculosis and melioidosis, a serious illness transmitted by rats. Intestinal parasites, roundworms and flatworms may lay dormant for long periods. Malaria, filariasis and schistosomiasis, a snail-born disease, are included.

There are variations in susceptibility to some of these diseases. Leprosy probably is contracted only on prolonged exposure for years. Thus it might be expected in Southeast Asian refugees, but not in U.S.

servicemen, who usually spent only one year in Southeast Asia. Some of the diseases affect Asians differently from North American whites, and the physician must be prepared to recognize a disease that is both uncommon in the United States and that also may affect Asians differently.

Tuberculosis is by far the most common infection imported by Southeast Asian refugees to the United States. Among adult refugees screened at Camp Pendleton, Calif., there was an estimated active case rate of 680 cases of tuberculosis per 100,000, as compared with 12 per 100,000 in U.S. adults. A much higher percentage of the refugee children also had tuberculosis.

In melioidosis, active disease has been reported as long as 26 years after exposure. Its most common manifestation is a chronic lung problem similar to tuberculosis, and also appears as skin ulcers and low-level infections. Thirty-nine cases of leprosy, 34 of which were new, were found during the initial screening phase of Vietnam refugees.

Chilly Rooms May Be Fatal To Elderly Persons

Conserving energy by turning down indoor thermostats might be fatal to certain elderly persons who cannot tolerate even moderate cold. Adaptation to temperature changes becomes less efficient with advancing age.

When exposed to cold, the aged do not increase their heat production as well as do the young. Also, they are often less able to sense the cold than they did when they were younger. Accidental chilling is more common and more lethal in the elderly. The victim may be found nearly dead in a room with a temperature that would be well tolerated by a younger person. And standard thermometers do not register the low levels of body temperature.

Maladaptation to temperature change in older persons is not always thought of, and they may be subjected to overzealous, injurious treatment. Active rewarming of the feet and hands, for instance, is extremely hazardous in the old. This causes a sudden inflow of cold blood, and may bring on a heart attack.

More important than therapy is prevention. Awareness of the possibility of hypothermia, even when the weather is mild, and more widespread use of low-reading rectal thermometers should help prevent an undue delay in diagnosis.

Prevention could be aided by the realization that the old need a warmer environment and that the current recommendations for maximal room temperatures do not allow for this need. If there is a conflict of interests between energy conservation and preservation of life, the resolution is not in doubt.

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EQUIPMENT FOR SALE

Private general practice clinic closing. Dynamax 40 x-ray machine consisting of tubes, cables, controls, transformer and table (machine and tubes in very good condition); Air Shield Pulmonary Function Recorder, including mouthpieces, charts and stylus; Bennette TA-1 IPPB Machine; EKG Cardiostat-T #5799 with transmitter, supplies and accessories; Physician scales. Contact Linda Godby, Smyrna, Tennessee (615) 459-6358, 8:00 to 12:00, Mon.-Fri.

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PHYSICIANS NEEDED

Full- and part-time medical consultants are needed by an agency in Nashville to assist in the evaluation of Social Security disability claims. Physicians with specialty or general practice backgrounds, who are licensed in Tennessee, are being recruited to review medical evidence and consult with disability examiners. Contact Disability Services at (615) 741-7686.

Secondary Amenorrhea Associated With The Use of Oral Contraceptive Steroids

A. W. DIDDLE, M.D., WILLIAM H. GARDNER, M.D., P. J. WILLIAMSON, M.D.,
JERRY R. JOHNSON, M.D., J.L. HEMPHILL, M.D., and C. W. GODWIN, M.D.

One of the problems receiving an increasing amount of attention in medical literature is secondary amenorrhea associated with the use of oral contraceptive steroids. This communication concerns the experience with a captive group of private patients given oral contraceptive drugs.

Materials and Methods

Subjects:

During 1973 through 1975, 8,686 consecutive patients ranging in ages from 14 to 46 years were seen. Oral contraceptive steroids were prescribed for 6,209 women and none for the remaining 2,477. Only patients with a follow-up of 11 months or more were included in the study. In addition, women afflicted with Stein Leventhal, early climacteric, Asherman's and Castillo syndromes, Simmond's disease, pituitary failure and cirrhosis of the liver were excluded. This left 3,024 users and 2,416 nonusers of oral contraceptive steroids.

Most patients were white (98%), the others were of various ethnic groups. For the most part all were economically of the middle class. Seventy-seven percent of the users of oral contraceptives were nulligravida, in contrast to 26.5% of the nonusers.

Method of Study:

Each patient had a complete physical examination, Pap smear, and urinalysis. Weight and height were generally recorded, and in most in-

stances past and family historical data were obtained. Treated women generally were examined annually, although if complications arose, consultations were more frequent; in contrast, untreated women were less precise in sequential consultation. Some patients in both groups were new to our service and had not returned for their annual study when this analysis was closed.

Rates of incidence of amenorrhea were analyzed in both crude and adjusted forms. Adjustments were made by the method of Linder and Groves. Statistical significance was determined using the G-test, chi square analysis of variance, and analysis of variance. Comparison of rates was done according to the method of Mantel and Haenszel.

Definition:

Nonpregnant patients with menses delayed longer than 60 days were considered to have secondary amenorrhea.

Medication:

Oral contraceptive steroids were prescribed on request of the patient. The medication was generally prescribed daily for three out of each four weeks. The drug selected for a given woman was dependent to some extent on the presence or absence of acne, breakthrough bleeding while on another oral contraceptive drug, emotional response, and body weight. The trend was to give medication that contained no more than 50 mg of estrogen (Table 1).

Results

Four hundred and ninety, or nearly 16% of

From the Memorial Research Center and Hospital, University of Tennessee and Fort Sanders Presbyterian Hospital, Knoxville.

Reprint requests to 402 Fort Sanders Professional Bldg., Knoxville, TN 37916 (Dr. Diddle).

AMENORRHEA & THE PILL/Diddle

the 3,024 treated women, changed medication one or more times, either to minimize a side reaction to a given drug or to taking a combination containing less estrogen. Amenorrhea persisting 60 days or more was experienced by 2.5% of the treated patients and 1.3% of the nonusers (Table 1). There was a significant difference ($P < .01$) in the drug-taking experience of women with amenorrhea and patients without amenorrhea. The incidence of amenorrhea was significantly correlated ($P < .01$) with the use of oral contraceptives.

Contributing factors leading to secondary amenorrhea of a hypothalamic origin are given in Table 2. Those women with secondary amenorrhea who were also affected by emotional stress

had experienced a tragedy or unusual pressure of work. Women who lost or gained more than 10% of their body weight in a space of two to three months were considered probably to have modified their metabolism abnormally. As of this reporting (1978) none has turned up with any other endocrinologic abnormality. Using the G-test, contributing conditions were found to be independent of the use of the contraceptives for women with amenorrhea. There was no significant difference between the group using drugs and those not using drugs.

The duration of amenorrhea ranged from 2 to 12 months with an average of 3.5 months. Only one woman had amenorrhea for one year, a para II who took norethindrone with 50 mg of mestranol for more than one year previously. Beforehand her menses were regular, and her body

TABLE 1
INCIDENCE OF SECONDARY AMENORRHEA
ACCORDING TO TYPE OF MEDICATION

	Total Patients Using Drug	No. With Amenorrhea	No. Without Amenorrhea
Norethindrone acetate with ethinyl estradiol*	713	15	698
Norethindrone with mestranol†	503	13	490
1 mg ethynodiol diacetate with 0.1 mg mestranol	462	17	445
0.5 mg norgestrol with 0.05 mg ethinyl estradiol	408	10	398
25 mg dimethisterone with 1.0 ethinyl estradiol	271	7	264
1 mg ethyndiol diacetate with 0.05 mg ethinyl estradiol	185	8	177
2.5 mg ethyndiol diacetate with 0.1 mg mestranol	115	3	112
10 mg medroxyprogesterone with 0.5 mg ethinyl estradiol	21	1	20
Unspecified	346	4	342
TOTAL	3,024	78	2,946

*Approximately half of the patients were given 2.5 mg and the other half 1.0 mg.

†Approximately a third of the patients received 2.0 mg, another third 1.80 and the remaining 1.50 dosages.

TABLE 2
INCIDENCE OF SECONDARY AMENORRHEA ACCORDING
TO THE PRESENCE OF CONTRIBUTING CONDITIONS

Contributing Cause	Total	No. Using Contraceptives	No. Not Using Contraceptives
Emotional Stress	24	7	17
Sharp Weight Gain	7	2	5
Sharp Weight Loss	9	5	4
TOTAL (with contributing cause)	40	14	26

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ROCHE

TABLE 3
INCIDENCE OF SECONDARY AMENORRHEA
ACCORDING TO AGE OF WOMAN

Age (in years)	Treated Patients			Untreated Patients		
	Total	With Amenorrhea	Without Amenorrhea	Total	With Amenorrhea	Without Amenorrhea
Under 20	941	10	931	453	13	440
21-25	1,212	36	1,176	520	6	514
26-30	516	24	492	548	3	545
31-35	199	5	194	377	3	374
36-46	156	3	153	518	1	517
TOTAL	3,024	78	2,946	2,416	26	2,390

weight remained essentially unchanged and normal for her height throughout the period of study.

Age of Patient:

Relationship of age of the patient and secondary amenorrhea is given in Table 3. Comparing the treated and nontreated groups, secondary amenorrhea was more common in those individuals older than 20 years for the treated group. The reverse was true for the untreated women.

The unadjusted rates of amenorrhea for a standard population was 25.8 for treated and 10.8 for untreated patients. The respective figures for the groups, had ages been identical, would be 26.4 and 12.9 per thousand. After adjusting for age, the Mantel and Haenszel test was applied. It showed a significant ($P < .01$) difference of rates for treated and untreated groups.

Secondary Amenorrhea and Pregnancy:

There was no significant difference in the gravidity experience of nonusers and users of oral contraceptive steroids (Table 4). Thirty-two of the treated women conceived after use of contraceptive steroids, but for the most part the remaining 46 women had no intention of conceiving at the time the amenorrhea appeared. Incidentally, some of the 32 treated who had secondary amenorrhea conceived before having another menstrual period.

Height and Weight:

The relationship of age of the patient was correlated with weight and height, according to the tables of Build and Body Study 1959, Society of Actuaries, for 72 treated and 25 untreated women

TABLE 4
INCIDENCE OF AMENORRHEA ACCORDING
TO GRAVIDITY OF WOMEN

Gravidity	Total	No. Using Contraceptives	No. Not Using Contraceptives
Gravid, prior to amenorrhea	32	19	13
Gravid, prior to and after use of contraceptives	17	17	—
No pregnancies	40	27	13
Gravid, after amenorrhea	15	15	—
TOTAL	104	78	26

with secondary amenorrhea. Approximately 15% of treated and 20% of the untreated women were overweight, or had sharply lost 10% to 20% of their body weight within a period of a few weeks before amenorrhea appeared.

Menstrual Rhythm and Secondary Amenorrhea:

The menstrual rhythm prior to the use of oral contraceptive steroids was considered reliable for 54 of the 78 women with amenorrhea. Forty had a regular rhythm in contrast to irregular cycles for the remaining 14. The corresponding figures for 28 untreated women were 14 and 14.

Duration of Medication:

Table 5 correlates the duration of treatment with use of oral contraceptive steroids and secondary amenorrhea. There was no significant as-

sociation (r approximates .92) between taking the drugs and having amenorrhea.

Discussion

Some investigators are of the opinion that secondary amenorrhea may develop as a woman becomes more underweight.¹⁻³ Serum releasing luteinizing hormone falls below normal and estrogen levels decrease. The oral contraceptive steroid may enhance this process. Contrariwise, serum luteinizing hormone followed by a rise in the estrogen levels accompanies rise in the patient's weight. McArthur and others³ learned that some patients may not reestablish their menses until they are actually overweight. The petite, underweight woman resumed her menstrual cycles more slowly after medication was discontinued. Apparently the hypothalamus is more sensitive to suppressive hormonal feedback in women with low body weights. Hanson⁴ advised that women with menstrual irregularities not take oral contraceptive steroids if they were concerned about their immediate reproductive capacity. We agree with this opinion.

Speroff⁵ wonders if patients with post-pill amenorrhea might have developed these symptoms even without the use of oral contraceptives. He questions the cause and effect relationship of secondary amenorrhea and oral contraceptive steroids. Pettersson and others⁶ in a study in Sweden found the normal incidence of secondary amenorrhea at any point in time for women 18 to 45 years old in a general population to be 1.8%, while for a year's experience it was 4.4%.

At this reporting, in our experience, the longest period of secondary amenorrhea followed by spontaneous recovery of menses was 12 months although amenorrhea has persisted for five years with recovery, according to Furuhjelm and Carlstrom.⁷ Most agree that symptoms persist for less than six months in the majority of patients affected.^{8,9} Hancock and others¹ found fewer than 1% of oral contraceptive users acquired secondary amenorrhea. The range in the literature is from two to seven per 1,000, but while some investigators have defined secondary amenorrhea as two months or even less, others require six months or more. If the latter criterion was accepted for this communication, nearly half (38 cases) of the patients, with amenorrhea of less than 2.5 months' duration, would be excluded, as

TABLE 5

INCIDENCE OF AMENORRHEA ACCORDING TO DURATION OF USE OF ORAL CONTRACEPTIVES

Duration of Treatment (in months)	Total Patients Receiving Treatment	No. With Amenorrhea	No. Without Amenorrhea
12-18	787	8	779
19-24	883	22	861
25-36	539	14	525
37-48	317	14	303
49-60	193	4	189
61-72	96	3	93
73-84	61	5	56
85-96	52	1	51
97-108	40	2	38
109-120	29	4	25
121-132	8	0	8
133-144	6	0	6
145-156	13	1	12
TOTAL	3,024	78	2,946

only 11 women experienced amenorrhea of six months or more.

The probability of secondary amenorrhea appeared to be increased if the interval between the onset of the menarche and the use of the oral contraceptive steroids was less than five years, whereas it was less common if the interval was more than five years.^{9,10} We could not document this observation.

Ingerslev and others² were of the opinion that oral contraceptive steroids contributed to development of secondary amenorrhea in about half the patients affected, while the drugs were not causal in the other half, and Shearman¹¹ had a similar philosophy. Pettersson and others⁶ believe psychogenic problems, smoking, and dietary restrictions are important causative factors. Since Biblical times it has been known that emotional turmoil may increase the likelihood of secondary amenorrhea. We support the opinions above.

Our current philosophy is that the woman who acquires amenorrhea with use of oral contraceptives should discontinue steroids until the cause is clarified. Specific therapy, other than improved nutrition, may not be indicated immediately if weight is too low; cutting down heavy smoking, if a factor, and counselling for emotional disturbance, if present, should also precede therapy. On the other hand, if at the end of three to four months menses are not reestablished, an endocrinologic study may be indicated, but patients who acquire pill amenorrhea should be comforted to know that usually the symptom is not serious, and even if pathology is identified later, generally it

is not related to the use of oral contraceptive drugs.

In conclusion, we were unable to prove that prolonged use of oral contraceptive drugs increases the incidence of secondary amenorrhea.

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ANTIVENIN INDEX CENTER

The Antivenin Index Center is a current catalog of snake-bite antivenins stocked in North American zoos, laboratories and related institutions. The Center provides a 24-hour-a-day retrieval service on antivenins available for the treatment of venomous snake-bite from native and exotic species. The index is limited to sera currently stocked by participating institutions. Also, full data is provided on telephone numbers and personnel to obtain emergency supplies of antivenins.

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- (3) Contact your nearest supply and make arrangements for emergency delivery of antivenin.

A Visit to the People's Republic of China

ADDISON B. SCOVILLE, JR., M.D.

It is preposterous to think that a three-day visit to any country qualifies the visitor to write knowledgeably about that country. Despite my reticence to record my observations, your Editor has asked that I present my impressions of a very short visit to the People's Republic of China. China is not only the largest country in Asia, larger than all of Europe minus the Soviet Union, but it is surpassed in area by only the Soviet Union and Canada. Its population of 900 million is only an approximation since no census, as we know it, has been taken. (This reminds me of the woman who had only three children because she had heard that every fourth child is Chinese.) Recently I have had the opportunity to visit Shanghai and Wushi in the east central portion of the People's Republic of China.

As passengers on a Norwegian cruise ship, we were warned before arriving at Shanghai not to take photographs as we sailed up the Huang Ho, or Yellow River. To be certain that there was strict compliance, what seemed like a battalion of Chinese soldiers boarded with the pilot and wandered around the ship observing our every action. Supposedly, there is a large naval base on this river, but all I saw was one World War I submarine, three destroyers, and a small number of gunboats. Possibly the Chinese military desired to keep the small size of their navy a secret. Except for this single episode, during our visit there was no limitation on photography or restriction of activity except that imposed by our inability to converse in Chinese.

Shanghai is one of the largest cities in the world, with an estimated population of over 11 million people. Following their humiliating defeat by Great Britain in 1842, the Chinese surrendered Shanghai and signed the Treaty of Nan-king which opened the city to unrestricted trade. The British, French, and Americans took possession of designated areas in the city, within which they had special rights and privileges. Toward the end of the century the Japanese also received a concession. This foreign domination of the city, so oppressive to the Chinese, lasted more than 100 years.

The area formerly occupied by the foreign nationals contains many beautiful 19th century buildings and easily could be mistaken for a Euro-

pean city. However, the remaining portions of the city are less attractive, with poorly built shacks lining narrow alleys and streets, and except for the new Indoor Sports Stadium and the Shanghai Industrial Exhibition Hall, the newly constructed buildings, including many concrete apartments, appeared shoddy.

Shanghai is revered as the birthplace of the Communist party of China which was founded and nurtured by Chairman Mao on July 1, 1921, and it was in this city that three armed uprisings against foreign domination were carried out, the third under the leadership of Chou-En-lai.

Shanghai residents, living in a major seaport, are more accustomed to visitors than those of inland Soochow and Wushi, where our group was followed by curious crowds as though we were people from another planet. The people here were neither hostile nor friendly. On the other hand, the Shanghai crowd, thoroughly disciplined, lined the streets and smiled and applauded as we passed. Although beautiful silks are available in the stores, both men and women wore formless baggy pants and high-collared Mao shirts of dull blue color. We did see some colorful shirts in Wushi, but almost all the people we saw in both Wushi and Shanghai wore drab clothes. Many wore short-brimmed blue caps popularized by Mao-Tse-tung. Our 22-year-old female guide told us she had not worn a skirt since she was 14.

Wages for most workers are pitifully small. With the exception of university professors and doctors, who have a slightly higher income, the average worker receives only \$36 per month, but despite this low average wage, prices are similar to those in the United States. Bicycles, which must have numbered in the hundreds of thousands in Shanghai, cost about \$90 each, almost three months' wages.

Each morning in block after block shopkeepers stand in front of their shops doing calisthenics in unison. Everywhere we saw joggers. On sidewalks and in parks there were individuals performing slow motion dances, their impression of shadowboxing which may achieve grace, but it certainly will not develop muscles.

I was impressed with the huge numbers of people. The streets are overflowing with them and

nowhere in the world have I seen so many in one place. Since the country is atheistic, there is no weekend holiday from work. People work six days a week, but stores have different days of the week for closing, and as a result the number of people on the street remains relatively constant each day. This is fortunate because if more were off on any one day, I cannot imagine where they could be put. It is not unusual to see queues of 200 to 300 people on the street waiting to get into a department store just as people in our cities line up outside a movie theater. The No. 1 department store is said to serve over 150,000 customers each day.

Despite the obvious opportunities for crime and stealth among these masses of people, everyone seems honest. None of our group lost anything, and 30 minutes after I left one store, a young clerk chased me further down the street so she could return change I had inadvertently left. Our guide refused gifts of all sorts but finally accepted several magazines "as a way of helping to master the English language."

The Chinese government recognizes that there is obvious need for birth control. No man can marry until he is 27 years old and no woman until she is 24. Because there is such close surveillance in this society, premarital sex is apparently almost nonexistent. When a man and woman marry, each gets a food stamp, and with each of the first two children they may receive additional food stamps. But from that time on, regardless of the number of additional children, no more food stamps are issued to that family. Since food is barely sufficient for those with food stamps, this restriction is a very effective control measure. We were informed, however, that on rural farms restriction of food stamps is somewhat less effective than in the city. Sterilization is usually by vasectomy rather than contraceptive pills.

Much of the country was Buddhist until the advent of Chairman Mao, so that many of the older people continue to worship and attend the Buddhist temples. But those born after 1949 worship only Mao-Tse-tung. We saw very few temples being used in the city of Shanghai and those few had room for less than 100 persons each. Despite the many Christian missionaries who lived and taught in China prior to 1949, we saw no evidence that Christianity had survived the revolution. I asked our guide how Chairman Mao taught them to act toward their neighbors. He said, "We must treat them as we want them

to treat us." I replied, "That sounds like Jesus Christ." He asked, "Who is he?"

Apparently one of the major achievements of Mao has been to increase food supply so that sufficient food is available for this huge population. Every available piece of land is under cultivation. Although we were served many courses of food at dinners, most of which were excellent, I feel certain we were fed much better than the average Chinese. Very small plates were used and one either served himself from numerous platters in the center of the table or was assisted by one of the Chinese hosts more adept with chopsticks, with which, as there was no silverware, most of us became highly skilled. I boasted about my own ability to eat a single peanut with them. The soups were watery and did not seem tasty, but fish, meat, and most vegetables were excellent. Both beer and wine were served with meals, and although some of the wine tasted like perfume, most was delicious and the beer was excellent. No drinking water was available at the table.

Hot tea was served in beautiful round porcelain cups decorated with exquisite paintings. Because the weather was quite cold, the cups also served as efficient handwarmers. We were reluctant to drink as much as we were offered because public toilet facilities were few and in many places nonexistent.

Although the food supply is considered adequate, housing is pitiful. It is very poor, both in the cities and in the rural areas. The average home consists of two bedrooms, one of which converts into a living-dining room, a kitchen, and occasionally a store room. Furniture is almost nonexistent. Toilet facilities, except for a chamber pot, are absent, and running water, sometimes present in the city, is not available in the country. There are no heating facilities in the rural areas.

We visited a commune of 30,000 people which boasted of manufacturing facilities and farms, the former consisting of people sitting on the cold ground in sheds weaving baskets. Those of us used to a better life recognize, however, that if mechanization should be introduced, it would bring on massive unemployment.

Farm animals, cattle, hogs, sheep, goats, and chickens are kept in small fenced enclosures or barns. No cattle are seen in the open fields. Deer are raised for their antlers, which are ground and used in tonics or as aphrodisiacs. The fields are well irrigated and in the corner of each is a large circular pit which serves as a storage tank for

VISIT TO CHINA/Scoville

both human and animal fertilizer. Ducks, plentiful in irrigation ditches, ponds, and rice fields, keep the water free of snails and ultimately are used for food. Fish are also raised in these same waters. Three crops a year are raised in the Shanghai area. As another employment measure, all farm work except for plowing is done by hand, and except for the tractors used for plowing, we saw no mechanized farm equipment.

Transportation around towns and cities is either by foot or bicycle, since there are no private cars in China, and the few cars, trucks, and buses which are seen are owned by the government. Three-wheeled cars are used for taxis and the fares are relatively cheap. The small number of cars results, of course, in a paucity of gasoline stations, and it seems strange to ride through a large city and not see a gasoline pump! I had always envisioned rickshaws in China, but Chairman Mao must have banished them, as we saw none in any of the cities we visited.

Trains are typically European, with compartments seating six or sleeping four. They are very comfortable because of the smooth roadbeds, and the Chinese are meticulous about keeping them on schedule. Tea, as might be expected, was available on a table in each compartment.

Goods from the rural areas are transported on boats which are poled or sailed through numerous canals. The sailboats used bamboo battens and had lateen rigging, which I had always associated with Africa. Goods from one commune cannot be traded, given, or sold to a neighboring commune without first going into a central government depot and then being reshipped back to the neighboring commune. Bureaucracy exists in China, too!

Only 4% of the population of China belongs to the Communist party. Membership is prized and apparently difficult to obtain except after personal recommendation as well as by examination. I was surprised that some of the guides assigned to our group had not yet been able to gain membership. We heard speeches of welcome, talks about length of medical school and university training, problems on communes, and always the "gang of four" was blamed for anything that went wrong. Every speech included a derogatory statement about this notorious group. Every speech also expressed confidence that things would improve and emphasized there had been

a marked improvement in production since "the liberation in 1949." There was no mention that prior to 1949 China had been devastated by civil wars, and that as a result production at that time was close to zero.

A visit to a Children's Palace was very interesting. One of these is situated in each of the ten districts of Shanghai as well as in other cities of China, established to teach children extracurricular activities; we saw sword play, accordion bands, orchestras of Chinese musical instruments, painting, sculpturing, needlepoint, and many other activities. The children were well behaved and apparently selected for their particular talents. It was amazing to see young children doing needlepoint. They had no pattern on the canvas and were copying small pictures. Children in China, as well as adults, are smothered with propaganda. They played songs with titles such as "The Sun Shines Over Peking" and songs deploring the "gang of four."

Medical care in China is provided by the government. Although people in urban areas pay no special taxes for medical care, individuals in the rural areas must pay one to two yuan per year, because the poor economy of the rural areas produces no funds to provide for medical care. Unlike our civilization, where the poor are helped by the more affluent, in China the poor must fend for themselves. People in rural areas are cared for by a doctor for one year out of every five; for the remaining time medical care is provided by barefoot doctors, who usually have received their training in the country, and who are apparently less well trained than our physician's assistants. For those interested "A Barefoot Doctor's Manual," translated from the Chinese, is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, price \$9.75 (DHEW Publication No. [NIH] 75-695).

The formal course of instruction of physicians is approximately the same as that in the United States. Although a university degree is now obtained in four years, it initially required five, and medical school, which is now four years, under the "gang of four" required at first eight years, but was later reduced to six. As dictated by Chairman Mao students are taught both "traditional Chinese" and western medicine. I visited a large Shanghai hospital, Hching Hua Hospital, which had 200 interns and 600 students in the nursing school. There were 3,000 outpatient

visits to this hospital each day. The wards had four to eight beds, and since there were no coronary care or intensive care units, all patients were cared for on these wards. As in most American hospitals, the surgical patients were segregated from the medical patients. The Chinese have a heart-lung machine, and open heart and pulmonary surgery are performed.

My guide told me he had had acupuncture for migraine headaches and "stomach trouble." He said the needles were placed in the webbing between the thumb and second finger in both instances.

I observed a thyroidectomy done under acupuncture. Both needles were placed in the posterior cervical region and were vibrated by an electric current. The patient had received intravenous phenobarbital (Luminal) prior to arriving in the operating room and remained alert during the entire procedure. She flinched once when the surgeon tugged on the thyroid isthmus, and this was followed by an episode of nausea and vomiting. We were told that excellent results are obtained with acupuncture for surgical procedures performed above the waist, but the results are less satisfactory for operations below the waist, I suspect because of poor muscle relaxation from

acupuncture. I was impressed with their surgical technique.

A movie was shown of the couching procedure for cataract surgery, a procedure used by the Arabs for at least 4,000 years. It takes only five minutes and is used extensively in the cities and less extensively in the rural areas, where it is performed by some of the barefoot doctors. In this procedure the cataract capsule is lacerated and presumably absorbed. By breaking the zonules (tiny collagen fibers) the cataract is pushed back into the vitreous, where it lies for life. Crude as it is, this is probably the most satisfactory method of improving the vision of those multitudes who have need for cataract surgery. It is interesting that such diverse things as the lateen rigging for sailboats and the couching procedure for cataracts had been used both in Africa and China for thousands of years.

It was a fascinating trip—depressing to see the conditions in which one-quarter of the world's population lives, but exciting to see how they are attempting to cope with their many problems.



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AMACO's primary objective as mandated by the House of Delegates was to encourage the development of a more equitable and reasonably competitive reinsurance market on a commercially sound basis. The young company is fulfilling that objective.

The Economics of National Health Insurance

THE HON. TIM LEE CARTER, M.C.

I'm glad to be here with you today for your medical alumni reunion. It's especially nice to be among friends and colleagues—where I am not the only doctor in the house! Reunions offer a unique opportunity to think over old times in light of today's problems and priorities.

Just coming to Tennessee is a reunion of sorts, because I attended medical school in Memphis. Those were the good old days. Although we did not receive a salary as our interns do today, neither did we even contemplate the right to bargain collectively with hospital administrators. As you well know, the practice of medicine has changed markedly over the years, not only because of new lifesaving technologies and wonder drugs, but because of the increased involvement of the federal government in the health care field.

With enactment of Medicare and Medicaid in 1965 the federal government became a "third-party" to the doctor-patient relationship. Some say this development was for the better, others say it was for the worse, yet it is a fact that with Medicare and Medicaid, millions of elderly and poor Americans now have access to medical care which they did not have previously. But on the other hand, the problems of fraud and abuse in these programs have wasted millions of taxpayers' dollars that could have been used to provide needed services.

Clearly there is no simple solution to our health

Presented as a part of the Symposium on Economics of Health Care at the Vanderbilt Medical Alumni Association Reunion, May 20, 1978, at Vanderbilt University, Nashville.

Tim Lee Carter was born in Tompkinsville, Ky., and received his M.D. degree from the University of Tennessee in Memphis. He practiced medicine in Tompkinsville until Aug. 10, 1942, when he volunteered for service in the U.S. Army. He served as a combat medic in the Pacific Theater during World War II, after which he returned to private practice in his home county. He was elected to the U.S. House of Representatives on Nov. 3, 1964, and has been elected to each succeeding Congress, presently serving his seventh term as Fifth Kentucky Congressional District Representative. He has served on the Committee of Interstate and Foreign Commerce and was selected as the ranking minority member of its subcommittee on health and the environment in January 1975. He also is ranking minority member of the Committee on Small Business' subcommittee on energy, environment, safety and research.

care problems regardless of whether or not the federal government is involved. But when federal intervention becomes an issue we physicians should take an active role in the decision-making process. If we do not, others who are less well qualified to speak for us will make our decisions, which is why I have chosen to serve on the health and environment subcommittee for the 14 years I have been in Congress. From that vantage point I have had an opportunity to develop and improve a variety of programs to provide and improve health care for our people.

Over the years we have developed legislation for health manpower training, health services programs, cleaner air and water, biomedical research, and many many other issues. But there is one issue which has remained without a satisfactory resolution, and that is national health insurance. Because of the importance of NHI to the government and individuals as well as to the health industry, I'm very pleased to be here to discuss the economics of national health insurance.

I must confess that I have never had much time for formal study of economics, what with learning the names of bones and muscles and nerves, delivering babies, and running for Congress. In fact, talking to you about the economics of national health insurance makes me feel a little bit like the man who could talk about nothing but how he survived the great Johnstown flood of the late 1930s. Everywhere he went the only thing he talked about was how he survived the Johnstown flood. When he died and went up through the Pearly Gates, Saint Peter welcomed him and said, "It's good to see you. We have a very easy first day set up for you. A tea at four o'clock, and of course you'll be expected to make a few appropriate remarks." The man said, "Fine, I'd like to talk about how I survived the Johnstown flood." Saint Peter paused a bit, then said, "Well, all right, if you insist. But will you bear one thing in mind?" "Surely," the man said. "What is it?" And Saint Peter said, "Noah will be in the audience."

Keeping that in mind, because I know there probably are several economists here, including the distinguished Professor Dunlop who will be

speaking later—I would like to share a few of my thoughts on the economics of national health insurance.

Various NHI proposals have been considered since the days of the Bull Moose party's platform, but the timing has never been right to see any proposal enacted. Some say conditions are now as favorable as can be expected, and that NHI will become a reality. I should mention that when this administration was elected there were great predictions about all of the new legislation that would ensue when both the Congress and the White House were again controlled by the same party. Yet we see that the President's biggest proposal, the energy bill, unfortunately still is languishing in Congress more than one year after its introduction. Obviously having a majority is not the same as having the votes!

At the outset, let me state that I DO support enactment of NHI legislation. I support a proposal that builds on the strengths of our current private insurance system, and that will insure protection for all Americans against the financial risks of disease and injury. This approach is reflected in legislation developed by the American Medical Association which I have introduced into this Congress as H.R. 1818. Forty-eight members from the House of Representatives have joined as cosponsors of this legislation. However, before discussing the provisions of H.R. 1818 and its economic implications, let us consider briefly the need for national health insurance.

At the present time the bulk of the population, in fact about 80%, has some form of hospital or surgical insurance through the private sector. In addition, publicly funded programs such as Medicare and Medicaid provide various types of health benefits coverage for a large segment of the population. Yet careful examination of this coverage reveals many gaps in protection. For example, in 1974 there were more than 9.5 million poor people who were not covered by Medicaid because of variations in state programs. There also is an increasing number of elderly who are not covered by Medicare because they cannot meet the stiffer eligibility requirements enacted in 1975. Moreover, many unemployed persons do not have insurance protection.

It has been estimated that 18 million Americans will be unprotected by any form of health insurance in fiscal year 1978. Another 19 million will have *inadequate* protection. Clearly the scope and nature of existing health insurance coverage varies greatly but it is the poor and

elderly who are most likely to lack adequate insurance coverage.

The legislation I have introduced would make comprehensive private health insurance available to all persons on a voluntary basis regardless of income. H.R. 1818 would extend both basic and catastrophic health benefits to the entire population. Benefits include full hospital care, full physician care, home health services, emergency care, laboratory and x-ray services, and up to 100 days in a skilled nursing facility. A range of preventive services such as physical examinations, family planning, and immunizations also are covered by the legislation.

Under H.R. 1818 health insurance protection for most persons would come through private insurance purchased through employment. Employers would be required to pay at least 65% of the premium, and the employee would pay the difference. Low-income persons or the unemployed would obtain the same full coverage as anyone else. The government would contribute toward their health insurance premiums on the basis of their tax liability. Elderly individuals also would be able to obtain private insurance to bolster the level of their Medicare benefits. The government would supplement their premiums as needed. In general, as income increased federal assistance would diminish.

To help hold down the costs of the program there would be a 20% coinsurance for most participants, but the poor would pay nothing. There would be a limit on the total amount of coinsurance which any individual or family would pay based on an income-related formula, and there would be no deductible.

I would like to emphasize the important protection for catastrophic illness expenses that is provided in H.R. 1818. Under this legislation, once an individual or family reaches the payment limit for coinsurance, catastrophic protection would be triggered. For individuals, the maximum amount of coinsurance per year would be \$1,500. For a family the maximum amount would be \$2,000. In this way no one would find his savings wiped out by a single catastrophic illness.

Administration of this program would be left essentially to state governments to regulate insurance within each state. The regulations would be based on federal guidelines established under the program by a 15-member health insurance board. That board would be composed of seven M.D.s, one D.O., and one dentist, and the rest would be members of the general public. In-

insurance would be available to all persons regardless of prior medical history and on a guaranteed renewable basis.

I believe H.R. 1818 offers a reasonable approach to a very complex issue, with a minimum amount of government regulation. As a physician I have always made every effort to provide care to those who needed it but could not afford it. I hope we will not lose sight of that objective in the health care field. However, achieving that goal does not require a federally run monolithic program. That kind of national health insurance would only do more harm than good. One such monolithic proposal, the Kennedy-Corman health security bill, represents a striking contrast to H.R. 1818.

Senator Kennedy's bill would establish a comprehensive NHI program financed by payroll taxes and general revenues. It would be a mandatory plan, administered by the federal government through a health security board in HEW. Each year a national health budget would be established that could not be exceeded except for emergencies such as epidemics. Funds from the Health Security Trust Fund would be allocated by the board to each region of the country, and then to each Health Systems Area on a per capita basis. These funds would be used to pay for institutional services, physician and dental services, and other supplies and services. There would be no deductibles or coinsurance. Providers of health care would be compensated directly by the health security board, but ceilings on regional budgets would have to be maintained. Medicare and Medicaid would be terminated except where benefits under those programs were broader than they would be under the new health security program. As you can see—this proposal would result in a major restructuring of our health delivery and health insurance systems.

Now, assuming that H.R. 1818 or Senator Kennedy's bill were enacted and in place by 1980, what would be the economic impact of each bill? A basis for this comparison can be drawn from an independent study known as the "Trappnell" study, which was commissioned by HEW and which compares the costs of major health insurance bills in 1980. The biggest contrast between health security and H.R. 1818 can be seen in the impact on federal expenditures. Under health security \$130.1 billion in additional federal expenditures would be incurred. In contrast,

under H.R. 1818 only \$22.7 billion in additional federal expenditures would be needed. The difference in costs reflects another major difference between the two bills, namely, the degree of federal involvement and control. Under H.R. 1818 the major financing role lies within the private sector. No special taxes would be needed to finance the program. Federal funding would be very limited, and necessary only to cover the costs of premiums for those who cannot afford them. As is true today, most of the premiums for comprehensive health insurance protection would come from employee group insurance, and employers would pay the major part of the premium.

On the other hand, health security shifts the control of health insurance dollars to Washington and adds billions to the federal budget. Funds to finance health security would come from a 3.5% tax on employers' payrolls and a 1% tax on employees' wages and unearned income up to \$20,000. Because of these additional payroll deductions a major new burden thus would be placed on the already strained Social Security system if Senator Kennedy's proposal were adopted.

Now, if we simply look at the impact of these two bills on total health expenditures, differences between the proposals are somewhat less, but even here the impact of H.R. 1818 is \$4.5 billion less than health security would be. Total health expenditures under H.R. 1818 would be \$243.8 billion, whereas total health expenditures under health security would be \$248.3 billion. Of course, even *without* enactment of any NHI program, total health expenditures are expected to read \$223.5 billion in 1980.

It is clear that whatever NHI program is enacted, health care expenditures will rise, not only because of inflation, but because of the increased demand for services. Yet I do not believe we should place an arbitrary cap on expenditures as proposed in the health security bill. We may only succeed in putting a ceiling on the quality of care instead. Rather, I submit that we should work to strengthen various components of the health insurance plan to provide internal cost-consciousness and incentives to economize where appropriate. For example, H.R. 1818 requires some cost-sharing with the knowledge that coinsurance does deter use of some services. The objective is to reduce overutilization. However, studies also show that it is the poor who tend to reduce their visits to physicians much more drastically than other groups when cost-

sharing is involved. That is why H.R. 1818 requires coinsurance that is proportional to income. We do not want cost-effective measures to become a barrier to health care for those who need that care most.

Another economic issue with NHI is physician reimbursement. H.R. 1818 maintains the current system of payment for physicians on the basis of usual and customary or reasonable charges. To be frank, any attempts to force physicians to adopt federally determined fee scales would face strong opposition, and would most likely curtail availability of services. Even now, only 50% of the nation's physicians are willing to accept "assignment" under the Medicare program. We should also strengthen the role of PSROs under national health insurance. A physician clearly is the best one to decide whether or not a particular test or service is necessary and reimbursable. We must not let cost control become the only criterion for judging medical necessity.

I would like to mention one other component of H.R. 1818 that has important cost-saving potential in the long run, and that is preventive health care. As a physician, I know from first-hand experience the value of the preventive approach to medicine. Most NHI bills that I've reviewed do cover some preventive services, and I'm glad they do. But I would like to see an emphasis on periodic preventive visits at each stage of life from infant care to mature adulthood.

During the last Congress I introduced such a "preventive service package" in what was then H.R. 4747. I believe we need to provide carefully designed periodic screening services to identify health problems at the stages of life when they are known to occur. Treatment thus can be targeted at the problem as soon as it is identified, and more costly care later may be avoided, or at least minimized. Indeed, if we can encourage the health care system to emphasize the preventive approach we will have accomplished a great deal.

Perhaps the biggest question with NHI is "Are we ever going to get it?" Recently there has been a great deal of negotiating between organized labor, the administration, and Senator Kennedy's office. We have heard that President Carter will deliver a major statement on national health insurance within the next month. Rumors in Wash-

ington indicate that the health security approach may be dropped in favor of a plan involving private and public health insurance. Personally, I believe that the final form of NHI is likely to resemble H.R. 1818 in more ways than might be anticipated at the present time.

Inflation is perceived as our number one domestic problem by the people. Moreover, the public mood can be described as "antiregulation," and is unlikely to turn "proregulation." In light of these concerns, I expect that the philosophy of "the less government the better" may very well prevail. However, I doubt that any NHI bill will be enacted before the end of the next Congress at the earliest.

Theodore Roosevelt, whose Bull Moose party first proposed NHI, had the philosophy that we in government should do the best we can where we are with what we have. I've tried to follow that philosophy as well, and I hope it will dictate whatever NHI plan we finally enact. In any case, let's be sure that as physicians we participate in the debate on national health insurance. It is in the best interest of our patients and our profession, to do so, and in doing so, I hope we would keep in mind the sentiments of a poem that is a favorite of mine: "The Bridge Builder."

An old man going a lone highway
Came in the evening cold and gray
To a chasm vast and deep and wide.
The old man crossed in the twilight dim—
The sullen stream had no fears for him—
But he stopped when safe on the other side,
And built a bridge to span the tide.

"Old Man," said a fellow pilgrim near,
"You are wasting your strength with building here:
Your journey will end with the ending day.
You never again will pass this way.
You've crossed the chasm deep and wide.
Why build you this bridge at evening tide?"

The builder lifted his old gray head
"Good friend, in the path I have come," he said,
"There followest after me today
A youth whose feet must pass this way.
This chasm which has been as naught to me
To that fair-haired youth might a pitfall be.
He, too, must cross in twilight dim.
Good friend, I am building the bridge for him."



Why Not Do It?

THE HON. BOB PACKWOOD, M.C.

Most Americans think taxes are too high; and they are. The average American worked until May 6, 1978 just to pay the tax bill at all levels. Most Americans think government plays too great a role in their lives; and it does—32.9% of the gross national product goes to pay the cost of government. Government intervention of all kinds is expensive, irritating and burdened with red tape. And yet, polls consistently show the American public supporting government programs and increased funding for those programs.

This seeming contradiction is rooted in the American character and experience. We think of ourselves as a nation of rugged individualists, problem solvers with initiative and drive. But we also look for protection from disaster, security for our old age and a myriad of other social benefits. In the early days of our nation, that security was provided by an abundance of land and a close supportive family structure. Our lives were simpler and our needs more easily met.

The growth of governmental intervention in the 1930s was a response to pressure created by a people unable to help themselves. Land no longer provided security, and we became increasingly separated from traditional sources of support: family and religious institutions. People were desperate and turned to the government for security. The public sector responded with such programs as Social Security, WPA, CCC and

others. Politicians filled legitimate needs and the government grew.

Today, our lives are more complex, the demands have become greater: health insurance, day care for single parents, legal insurance, assistance for continuing education. If we don't head off the government from meeting these and other demands, the public sector will become like the large and shady banyan tree under which nothing grows. However, alternatives do exist; health insurance is a good example.



If we don't head off the government . . . the public sector will become like a . . . tree under which nothing grows.

A few years ago the drive for national health insurance in Washington was strong. Today, over 79.3% of the workers in this country are covered by private health insurance plans. The costs are deductible for the employers, the benefits are not taxable to employers, the benefits are not taxable to employees, and you mostly hear concern about national health insurance expressed at the Harvard School of Public Health. The truth of the matter is that for the vast majority of people in this country, the private sector is providing better coverage more cheaply than the government ever could. The pressure is off and we who vote in Washington know it.

We should follow this example: encourage the private sector through tax incentives to provide social benefits to American workers. We will all be better off. Taxes will be lower, we will have less government intervention in our lives, the economy will be stronger, and services will be better.

The question is not why do it, but why not?

Presented at the Annual Meeting of the Tennessee Medical Association, IMPACT Breakfast, Knoxville, April 14, 1978.

Senator Packwood (R-Ore.), a native of Portland, Ore., and a graduate of Willamette University in Salem, Ore., received his law degree from the New York University School of Law and practiced law in Portland from 1958 until 1968. In 1962 he was elected to the Oregon House of Representatives as the youngest member of the Oregon Legislature. After serving three terms in the state legislature, he was elected to the U.S. Senate—again, he was the youngest Senator in the 91st Congress. Reelected in 1974, Senator Packwood serves on the Finance Committee, Commerce Committee and the Select Small Business Committee. He serves as the chairman of the National Republican Senatorial Committee which helps determine policy and direction of the Republican party and is a member of the Temporary Special Committee on Official Conduct. He was voted one of Oregon's three Outstanding Young Men in 1967 and was named the Oregon Man of the Year in 1971 by the National Federation of Independent Business.

Pulmonary Sporotrichosis

CHARLES E. KOSSMANN, M.D., Editor

MICHAEL J. MUIRHEAD, M.D.:

The patient was a 53-year-old white man who presented in November 1977 with a three-month history of cough productive of mucoid sputum. For two months he also had a dull but intermittently pleuritic left upper anterior chest pain, mild anorexia, and a loss of five pounds in weight. There had been no chills, fever or night sweats. He smoked two packs of cigarettes per day for 25 years but denied chronic cough or expectoration. His personal physician reported that a recent thoracic roentgenogram showed a left upper lobe infiltrate.

He was referred to another hospital for confirmation of the clinical suspicion of pulmonary tuberculosis. Work-up included multiple sputum examinations which were negative for acid-fast bacilli or neoplastic cells; bronchoscopy revealed no endobronchial lesions, and bronchial washings also were negative for malignant cells. Three sputum cultures for fungi were subsequently positive for *Sporothrix schenckii*.

The patient was transferred to the Memphis V. A. Hospital where further questioning revealed that he had a positive tuberculin skin test (P.P.D., intermediate strength) in 1956 but had never received antituberculous drugs. Thoracic roentgenograms had shown no pulmonary infiltrate before 1970. Past history included excessive use of alcohol and alcohol withdrawal, but there were no known seizures or pulmonary aspiration. Family history was pertinent in that the patient's mother, brother and sister all died of pulmonary tuberculosis before the advent of chemotherapy. He had worked 20 years in the Navy as a cook on an aircraft carrier, and had spent 18 months in Vietnam but had no unusual illnesses. Since his retirement in 1972 he had spent much of his spare time working in his garden. He had rose bushes and had often pricked his fingers with thorns, but denied any history of cutaneous lesions. He had also worked with sphagnum moss in his garden.

Physical examination was unremarkable; there were no rales, rhonchi or other pulmonary abnormalities, and there were no specific skin lesions over the extremities nor was there any regional lymphadenopathy.

On admission a roentgenogram of the chest (Fig. 1) demonstrated patchy alveolar infiltration of the left upper lobe with multiple subapical radiolucencies ascribed to cavities.

Additional sputum smears for acid-fast bacilli and cultures for mycobacteria were negative. Multiple sputum smears for fungi were also negative, but all fungal cultures continued to grow out *S. schenckii*.

The patient received intravenous amphotericin-B with a planned total dose of 1.5 gm for the initial course.

From the Department of Medicine, University of Tennessee, 951 Court Ave., Memphis, TN 38163.

Memphis Veterans Administration Hospital Case No. 0680. Presented Jan. 11, 1978.



Figure 1. Roentgenogram of chest made on Dec. 9, 1977, showing fibronodular infiltration and cavitation in the left upper lobe.

JOHN P. GRIFFIN, M.D.:

There are fewer than 50 reported cases of pulmonary sporotrichosis.¹⁻³ I would like to emphasize not the rarity of the disease but rather the recognition of another form of treatable infectious pulmonary disease and the importance of culture of the sputum for fungi in the identification of disorders characterized by granuloma-like infiltrates. Most pulmonologists would seriously consider tuberculosis in this case in view of the positive tuberculin test, the strong family history for tuberculosis, and the cavities and infiltrate in the left upper lobe. Patients with primary fungal disorders were misdiagnosed in the past and committed to TB sanatoria where they often became secondarily infected by the tubercle bacillus. In fact, two of the original cases of pulmonary sporotrichosis reported were from sanatoria, and

one of these patients did also have active pulmonary tuberculosis.

The case presented emphasizes the importance of taking a careful occupational history. The story of being a cook on an aircraft carrier was not helpful, but the gardening of roses was suggestive.

Clinical Forms

The primary form of cutaneous and lymphangitic involvement in persons in various gardening occupations is the more usually encountered type of sporotrichosis. Current understanding of mycotic disorders suggests that pulmonary sporotrichosis, is also a primary infection but by inhalation rather than the dermal route. There has been a particular epidemiologic association of the disease with the use of sphagnum moss which is wrapped around seedling plants, trees, and roses to maintain moisture for long periods. Experimentally, this moss is an ideal culture medium for *S. schenkii*, which is found in soil throughout the world, although the heaviest concentration of isolates from a soil source has been in the mid-western United States. The fungus thrives on various plants and thorny bushes; accordingly it causes an occupational disease of professional florists and gardeners. In an area of Wisconsin from which a recent outbreak was reported,⁴ there are many bogs where sphagnum moss is grown. When harvested it is shipped all over the United States so that anyone working with seedling trees is at risk not only for inoculation of the skin but for inhalation of the spores. These spores are two to three microns in diameter, a size compatible with airborne pulmonary entry. *Sporothrix schenkii* is a biphasic fungus which lives in nature as a mold and in the body as a yeast.

Diagnosis

The prevalence of this disease in the primary pulmonary form is probably much greater than reported, but it has been confused with tuberculosis and other granulomatous diseases when sophisticated culture techniques in mycology are not available. The clinical and roentgenographic similarity is not only to tuberculosis but also to the endemic mid-southern histoplasmosis and blastomycosis. With the demise of the major fungal cooperative study groups of both the U.S. Public Health Service and the Veterans Administration, there is a shortage of individuals specifically trained in clinical laboratory mycology. There is no shortcut to the recognition of this disease;

diagnosis requires the performance of adequate fungal cultures by someone familiar with the identification of this organism. *Sporothrix schenkii* is very difficult to identify in histologic sections, a problem Dr. Cruthirds of this Medical Center overcame in his original report.⁵ His illustration showing the cigar-shaped *Sporothrix* in a resected pulmonary cavity has been reproduced in a number of reviews. To grow the organism, Sabouraud's medium is needed. At room temperature, the typical white circumscribed mold develops which characteristically turns black after a few days.

Clinically, the pulmonary lesions are usually in the upper lobes, as in this patient, and are often of a fibronodular character. In many instances they are associated with a thick-walled cavity of the type seen in tuberculosis and some other fungal infections. The patient often will have cough with or without low-grade fever, and many patients have weight loss as with any progressive granulomatous disease. Sputum is the usual source of diagnostic cultures although bronchial washings obtained at bronchoscopy may yield the organism, and in one patient the organism was cultured from a resected lobe of a lung. Clearly the last is the least desirable method of diagnosing pulmonary sporotrichosis. Possibly a closer review of surgical specimens with special staining techniques might increase the frequency of the diagnosis of primary pulmonary sporotrichosis from the large number of lungs resected for granulomatous lesions of unknown cause.

Almost all of the laboratory methods used in the diagnosis of infectious disorders have been attempted in sporotrichosis. There is a skin test which has not been widely applied because it is not very satisfactory. A complement fixation test has been developed⁶ but also is not often utilized. There are tests for precipitins and agglutinins as in classical systems, and even an immunofluorescent test, none of which are available in the hospital laboratory. The way to establish the diagnosis is to grow out the organism; it is the only foolproof method at the present time.

Therapy

As with any infectious disease, antimicrobial therapy is advocated, at least initially. All cases must be treated, if possible, because pulmonary sporotrichosis can progress to a fatal termination. There is no doubt that a relatively localized pulmonary lesion can be resected but this is not the preferred treatment.

As far as drug treatment is concerned, a saturated solution of potassium iodide administered in a dose of 0.5 ml tid has been recommended for the lymphangitic and cutaneous form of the disease, supposedly with good results. Dr. Tosh, chairman of the National Institutes of Health Cooperative Fungal Group, has commented on the unlikelihood of ever having a controlled prospective study comparing the therapeutic effectiveness of potassium iodide and amphotericin-B.⁷ There have been so many failures with potassium iodide that I do not advocate it as an initial form of treatment for the more serious pulmonary infection. Some investigators have developed a vaccine for *S. schenkii*, but this has been ineffective. The aromatic diamidines, such as 2-hydroxystilbamidine, are still used occasionally but have little or no effect on this disease. Griseofulvin has not been helpful even in the dermal form of sporotrichosis. The *Sporothrix* thrives *in vitro* in the presence of concentrations of potassium iodide that are impossible to achieve in the human host. Amphotericin-B *in vitro* and in various murine models is an effective drug for sporotrichosis. The current treatment for pulmonary infection recommended by Abernathy⁸ is 30 to 35 mg/kg in the initial course. This would mean, for the usual patient with weight loss, approximately a 1.5-gm course of treatment. This drug is given intravenously in single doses up to 1 mg/kg, on a daily to three times weekly schedule depending on renal toxicity. After a test dose of 1 mg, single doses are ordinarily increased by 10 mg until 50 mg per intravenous infusion are being given.

Amphotericin is a polyene agent which reacts with sterols in the cell membrane to cause damage to and lysis of the fungus. It is effective only by the intravenous route because this is the only method by which effective serum levels can be obtained. In an adult given a 1-mg dose, the serum level at one hour will be about 1.5 μ /ml; the half-time ($t_{1/2}$) of the drug approximates 24 hours. Occasionally in the presence of renal insufficiency, the drug can be detected in the serum up to seven weeks after injection. When treating an invasion of the central nervous system a rule of thumb is that one part in ten of the effective serum level will be found in the spinal fluid. Direct intrathecal therapy might, therefore, be advocated in such a situation.

Amphotericin-B is inhibitory of all systemic fungal pathogens *in vitro* but is not always effective *in vivo*. The minimal inhibitory concentra-

tion (MIC) of the drug for *S. schenkii* is 0.14 mg/ml. This is similar to the MIC of *Histoplasma capsulatum* and *Blastomyces dermatitidis* which are also clinically susceptible to amphotericin-B. The most resistant of these fungi, *Aspergillus*, has an MIC of 6.25 mg/ml, a serum level difficult to attain in the human host without unacceptable degrees of toxicity.

Some patients have underlying disease suggesting immunologic disorder. For example, there have been a number of cases of the pulmonary form complicating long-standing sarcoidosis. There have been patients with multiple myeloma and patients on high-dose steroids who have contracted this infection. Unfortunately, the number of cases is not sufficient to state whether we should routinely include this organism as a potential invader of the immunocompromised host or to initiate any kind of prophylactic therapy. It certainly should be searched for, as are other fungi, in such a patient.

There have been patients who have failed to improve on amphotericin-B in the suggested dosage. Recently reported⁹ was a patient who received almost 3 gm of amphotericin-B, hydroxystilbamidine, potassium iodide and had multiple pulmonary resections but died of progressive pulmonary sporotrichosis with a positive culture on every sputum specimen submitted to the mycology laboratory.

My recommendation is for an initial course of treatment of 1.5 gm of amphotericin-B. If sputum conversion does not occur and if localized cavitation persists, consideration of pulmonary resection is appropriate. An alternative method would be to pursue a second course of amphotericin therapy to a total of 3 to 4 gm if manifestations of toxicity do not prohibit its use.

GENE H. STOLLERMAN, M.D.:

There are a couple of comments I should like to make about chemotherapy. I think there is a great deal of emphasis placed on *in vitro* sensitivity as the approach to chemotherapy which, of course, is basic, but there are other considerations I think we ought to mention. The action of potassium iodide is by way of a strange and unknown mechanism that is not always designed to kill the organism but to liquefy the granuloma. In the old treatment of tuberculosis, iodides did liquefy caseating material and implement the proteolytic enzymatic action in the lesion which had been arrested in some way. Some investigators

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X-ray of the Month

ROBERT L. DUBUISSON, M.D. and A. JAMES GERLOCK, JR., M.D.

A 12-year-old boy presented with a fracture through the proximal one third of his femur following an automobile accident. Physical examination following immobilization in a Thomas splint revealed a moderate decrease in the peripheral pulses of the extremity. Arteriography was performed because of the persistent decrease in the pulse which persisted following immobilization of the fractured femur (Fig. 1). What is your arteriographic diagnosis?

- (1) Normal arteriogram
- (2) Arteriovenous fistula
- (3) Intimal tear
- (4) Pseudoaneurysm

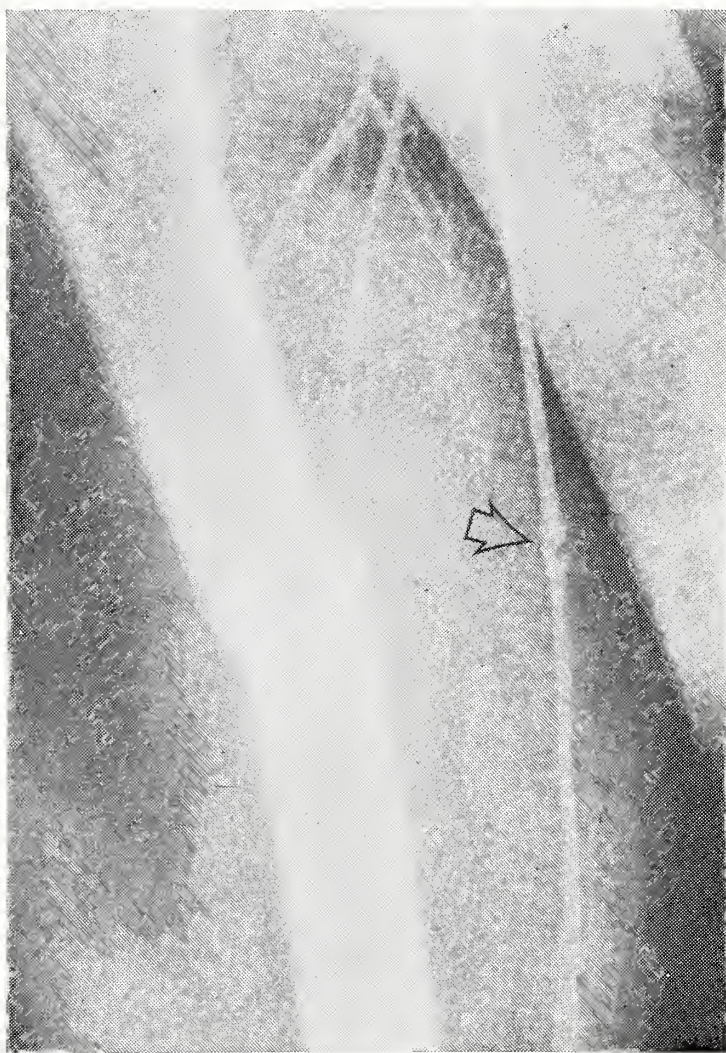


Figure 1. Arteriogram of the superficial femoral artery (arrow). Note also the fracture through the proximal femur.

Discussion

Significant arterial damage may occur following trauma, with preservation of peripheral pulses and normal neurological examination of the injured

extremity. Abnormalities such as pseudoaneurysm, arteriovenous fistula, intimal tear, and subintimal hemorrhage may present in this manner. Arteriography is usually diagnostic of these



Figure 2. Photomicrograph of the injured artery. The solid black arrows outline the tear in the intima and media. The adventitia is intact. A large thrombus is present in the vessel lumen (T).

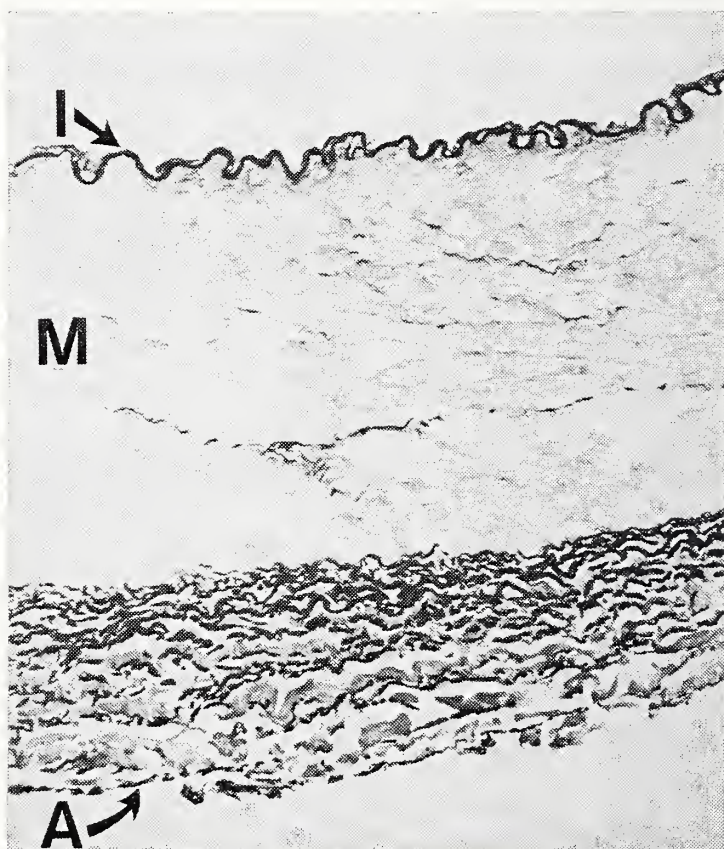


Figure 3. Photomicrograph cross-section of a normal artery. Tunica intima (I), tunica media (M), tunica adventitia (A).

From the Department of Radiology, Vanderbilt University Hospital, Nashville, TN 37232.

lesions in patients in whom arterial insult is suspected, and appropriate therapy may be initiated immediately.

The radiograph presented here represents an example of a tear in the tunica intima and media of the patient's superficial femoral artery. A cross-section through the site of this patient's arterial injury, depicting laceration of the intima and media with the adventitia intact, is shown in Figure 2. Compare this with Figure 3 which shows a photomicrograph of the cross-section of a normal artery.

In the patient shown here, an intimal flap is produced which is demonstrated radiographically by a small filling defect in the column of contrast media. Thrombus material has formed on the intimal flap, and the resulting increase in intra-arterial pressure has caused the intact adventitia proximal to the tear to bulge, as illustrated arteriographically. Despite the lack of occlusion of arterial blood flow, this patient had a very significant arterial injury.

An arteriovenous fistula would radiographically reveal a dilated proximal artery and vein with early venous shunting and possibly retrograde venous flow. Classically, arteriovenous fistulas produce a thrill and a continuous murmur with systolic accentuation on auscultation. A pseudoaneurysm, or a complete tear through all three arterial layers, would appear as an extraluminal bulge with prolonged visualization of contrast material on arteriogram. The surrounding hematoma may even compress the artery with only partial obstruction to blood flow. A pseudoaneurysm typically has a systolic bruit on auscultation and may have a palpable hematoma.

In conclusion, arteriography may be quite useful in the evaluation of arterial injury after trauma to an extremity. This procedure should be considered if vascular injury is suspected, even if distal pulses and neurological examination of the patient's extremity are normal.

Answer: (3) Intimal tear.



Oncology Grand Rounds . . .

Continued from page 515

presume the arrest was due to unsaturated fats that are toxic for the proteolytic enzymes and that the iodide may have inhibited the fatty inhibitor. We gave iodides infrequently in the past to get a positive culture in patients with pulmonary tuberculosis when we could not get the "red snappers" out any other way. Liquefaction of the granuloma can be a dangerous thing because it can result in dissemination of the causative organism. On the other hand, if an effective antibiotic is available, it can often give you a way of attacking the otherwise inaccessible organism.

It must be recognized that antibiotics don't usually get into host cells with the exception of some unusual new ones that interfere with DNA synthesis in certain viral diseases. The ordinary antibiotic kills the invading organism before it is engulfed by phagocytes and, therefore, the effectiveness of the blood level is really related to the attack on the extracellular invader. Then the host goes ahead and wins the intracellular battle usually within the macrophage. What you do with chemotherapy is protect the host from extracellular dissemination until he wins the victory or until he relapses and loses the contest by in-

ability to contain the infection. I don't know what iodides do in sporotrichosis but you might consider one problem in resistance to therapy to be the breaking down of the granuloma. It might be interesting to consider a combination of iodides and amphotericin in some stubborn cases. I raise this point to emphasize that the issues of chemotherapy are not always a question of winning the extracellular battle by the blood level although that certainly is important.



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The "Battered Specimen Syndrome"

JOSEPH J. SANNELLA, M.D.

"Tremendous expenditures of effort and money have been wasted on clinical and epidemiologic investigations in which every critical requirement was carefully met—except those for proper collection, transport and storage of specimens. The "Battered Specimen Syndrome" is unfortunately widespread, and we are constantly being asked, in effect, "How badly can I maltreat the collected samples (for the convenience of the study design, staff, patients, or whatever) and still obtain reliable results?" The answer is, obviously, that without the proper specimen and assurance of its integrity until analysis, one may as well dispense with the analysis entirely."

—Dr. Alan Mather
Center for Disease Control

I heartily agree! In our laboratory, we process samples from hospitals and from physicians' offices. The former are generally of better quality than the latter. Only two pieces of relatively inexpensive equipment are necessary to insure satisfactory integrity of most samples. The first is a small household refrigerator with a freezing compartment and the second is a centrifuge. The most important contribution to specimen integrity, however, is a well-trained and conscientious office staff.

Recently, a patient was considering a lawsuit to recover hospital costs because "laboratory errors" had led to a mistaken office diagnosis of possible insulinoma. The diagnosis was based on highly suggestive symptoms and three blood sugars, all below 40 mg/dl. The hospital workup

which followed was expensive and, indeed, totally unnecessary. However, the errors were not analytical, but rather, loss of specimen integrity. In each of three instances, the serum was not separated from the clot until the day following collection. A relatively untrained office assistant saw no harm in waiting. She had done it many times before!

There is no inexpensive way to identify the "battered specimen" with absolute assurance. For example, a grossly hemolyzed specimen is not necessarily the result of *in vitro* insults. In order to prove that one is not dealing with intravascular hemolysis, the serum pigment would have to be proven (1) to be hemoglobin and not myoglobin, (2) to contain normal levels of haptoglobin, and (3) to have a relatively normal potassium level.

When hemolysis is not present but the serum has not been separated from the red cells in a timely fashion, there is no way to identify this loss of integrity. Anyone who thinks the pattern of results can identify such a specimen every time is mistaken. For example, if a hyperglycemic (200 mg/dl) and hypokalemic (3.0 mEq/L) patient has blood drawn and the serum is not separated from the clot for 24 hours, even though the sample has been refrigerated, the glucose will fall to about 100 mg/dl and potassium will rise to about 4.0 mEq/L. These two very important abnormalities artifactually become "normal."

The following (which should be reviewed by your office staff) is a brief outline of the general principles involved in preserving the integrity of most laboratory specimens:

From Clinical Laboratories of Nashville, 5 Park Plaza, Nashville, TN 37203.

1. Identification

- A. Misidentification constitutes total loss of integrity. The safest rule is that whoever draws the blood has the responsibility to label immediately following initial care to the phlebotomy site. This is especially important in offices with either more than one physician or more than one assistant.

2. Routine Serum Chemistries

- A. If the specimen is collected with a syringe, the blood should not be expressed into a test tube through the needle. Doing so causes hemolysis and this causes false elevations of SGOT, LDH, potassium and creatinine.
- B. Allow 30 to 60 minutes at room temperature for the specimen to clot. Insufficient time will cause traces of fibrinogen to remain. Protein studies will be inaccurate, and agglutination tests may become falsely positive.
- C. *Gently* rim the clot with a wooden application stick and centrifuge for 15 minutes. Hemolysis must be avoided.
- D. Carefully aspirate serum into a second tube using a disposable Pasteur pipette. Never attempt to separate by pouring or mouth pipetting. Pouring invariably introduces red cells which will either hemolyze or leak constituents. Mouth pipetting is a sure road to hepatitis. Delayed separation of serum from the clot causes glucose to fall and also produces progressive rise in potassium, phosphate, creatinine, SGOT, and LDH.
- E. Cap the tube and keep refrigerated. If uncapped, evaporation will cause the concentration of all constituents to increase. If unrefrigerated, bacterial growth probably will occur and numerous test artifacts are produced. Additionally, many enzymes will lose their activity. The refrigeration is also good protection against light, which breaks down bilirubin.

3. Whole Blood Specimens for Chemical Analysis

- A. Simply keep capped and refrigerated but also avoid mechanical agitation.

4. Whole Blood Specimens for Hematologic Analysis

- A. Vacutainer-type tubes are best for these studies since the anticoagulant and degree of vacuum are quality controlled to insure proper sample size and degree of anticoagulation.

- B. If a syringe is used, avoidance of expression through the needle is as important as in chemical analysis, but for different reasons. Disruption of cells causes erroneous counts and indices.

- C. Gently invert tube several times to insure that anticoagulant and blood are thoroughly mixed. If large or small clots form, all blood cell counts become inaccurate.

- D. If a differential is to be performed and the sample will not *arrive* at the laboratory within six hours, a smear should be prepared. Cellular morphology rapidly deteriorates and granulocytes disrupt. The net result is that important diagnostic clues are effaced.

- E. Refrigerate immediately since cold temperature effectively delays the changes in cell shape, volume, maturation and disruption rates that can significantly change values. Freezing must be avoided.

5. Whole Blood Specimens for Coagulation Studies

- A. Vacutainer-type tubes for coagulation studies contain premeasured amounts of citrate anticoagulant and vacuum. The tubes must be completely but *passively* filled with blood to insure the final proper concentration of anticoagulant to plasma. Incorrect filling gently modifies results.
- B. Gentle mixing is essential to avoid any degree of clot formation. Even tiny clots significantly change results.
- C. If tests will not be performed within 30 minutes, the specimen should be centrifuged at high speed for 15 minutes and the plasma transferred by Pasteur pipette to a plastic tube which should be capped and then immediately frozen. Obviously, with this kind of preparation whole blood clotting times cannot be performed.

The above outline refers to most categories of routine testing. Special examinations, such as bacteriology and cytology or tissue and body fluid examinations, require and usually receive more careful handling because specimen procurement is usually performed by the physician. Misleading laboratory data are more likely to result from routine tests than special examinations, because there are more chances for loss of specimen integrity in the former.

Even though the test is "routine," the consequences of "error" are not necessarily minor.

Measurement of Residual Urine Volume Without Catheterization

ROBERT L. BELL, M.D.

Eight days prior to admission, this 34-year-old white woman developed acute urinary retention following a uterine curettage at another hospital. She was catheterized, and 2,000 ml of residual urine was obtained. Several antibiotics were administered empirically, but no urine culture was obtained, and chills and fever were never present. She went home but persistent complaints of low back pain, dysuria, and malaise led to re-hospitalization. Her past medical history revealed intermittent attacks of acute cystitis.

On admission the patient was well hydrated. A bilateral renogram using I-131 Hippuran showed normal renal function bilaterally. After the renogram curves were obtained, the net activity over the urinary bladder was 58,700 counts per minute before voiding and 4,350 counts per minute after voiding. This indicated that 93% of the radioactivity left the urinary bladder in the 520 ml of urine that the patient voluntarily voided. The residual activity suggested that approximately 41 ml of urine remained in the urinary bladder, an amount that is certainly within normal limits and also probably within the limits of the error of this method. Ultrasound images before voiding (Fig. 1) revealed a large urinary bladder. After voiding (Fig. 2) the urinary bladder could not be visualized, indicating complete or nearly complete emptying of the urinary bladder. Finally, the reaccumulation of activity in the urinary bladder over the 30 minute period after voiding indicated that approximately 22 ml or 0.7 of an ml per minute accumulated in the urinary bladder, within normal limits for a patient who is extremely well hydrated. The patient's urine cultures persistently showed no growth of organisms.

Either the isotope technique or the ultrasound technique are simple, noninvasive methods for measuring the volume of the urinary bladder

From the Department of Nuclear Medicine and Ultrasound, Park View Hospital, Nashville, TN 37203.

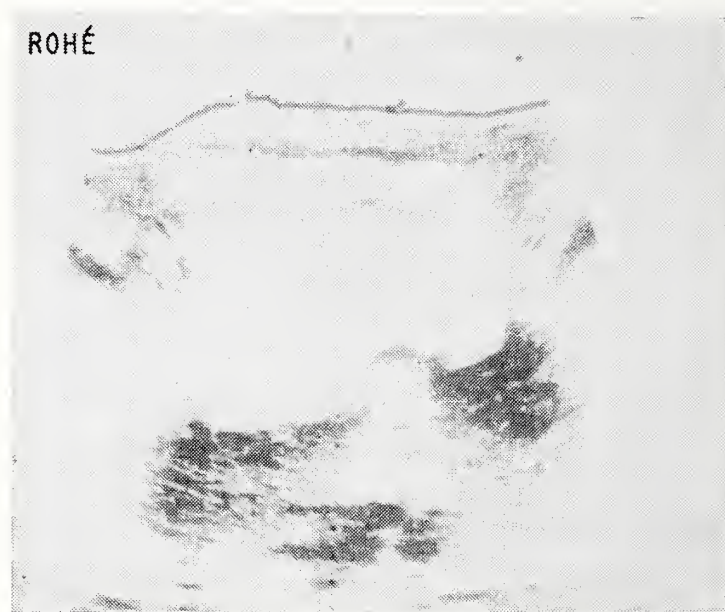


Figure 1. Ultrasound image of the bladder before voiding.

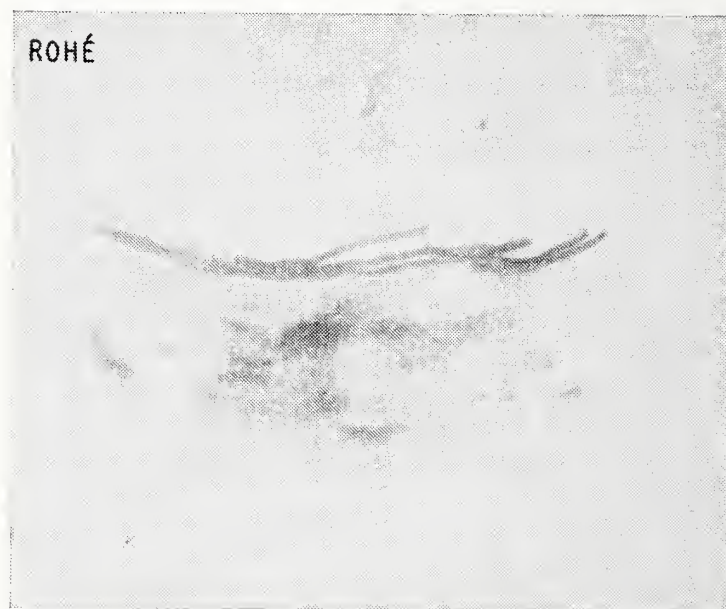


Figure 2. Ultrasound image of the bladder after voiding.

without catheterizing the patient. When the two techniques are performed together they reinforce the information on urinary retention derived by either method alone and also add significant data on renal function and on pelvic masses. This noninvasive approach should be a welcome respite from the complications of catheterizing the urinary bladder.

EKG of the Month

W. BARTON CAMPBELL, M.D.

A 53-year-old man was transferred to St. Thomas Hospital after having an episode of severe chest pain accompanied by development of Q waves in leads II, III and AVF two weeks prior to admission. There was no subsequent chest pain. He was taking propranolol hydrochloride (Inderal) 20 mg four times daily and isosorbide dinitrate (Isordil) 5 mg four times daily. Admission physical examination was unremarkable. Electrolytes were within normal range, including a potassium of 4.5 mEq/L and a calcium of 10.1 mg/dl. While in the hospital, left heart catheterization with selective coronary angiography was carried out. He was found to have a large area of inferior hypokinesia with a reduced left ventricular ejection fraction. He had complete occlusion of his right coronary artery. Shown is his admission electrocardiogram (Fig. 1).

interval between terminal portion of P wave and onset of QRS) is 0.06 seconds. A P wave is inverted in V_1 . These findings are characteristic of left atrial enlargement.¹

Q waves are present in leads II, III and AVF. They have a duration of 0.08 seconds in AVF. Note that there is T wave inversion in leads III and AVF. These findings are compatible with an inferior wall infarction. The T inversion in leads III and AVF suggest that the infarction is "evolving."

The QT interval is measured from the begin-

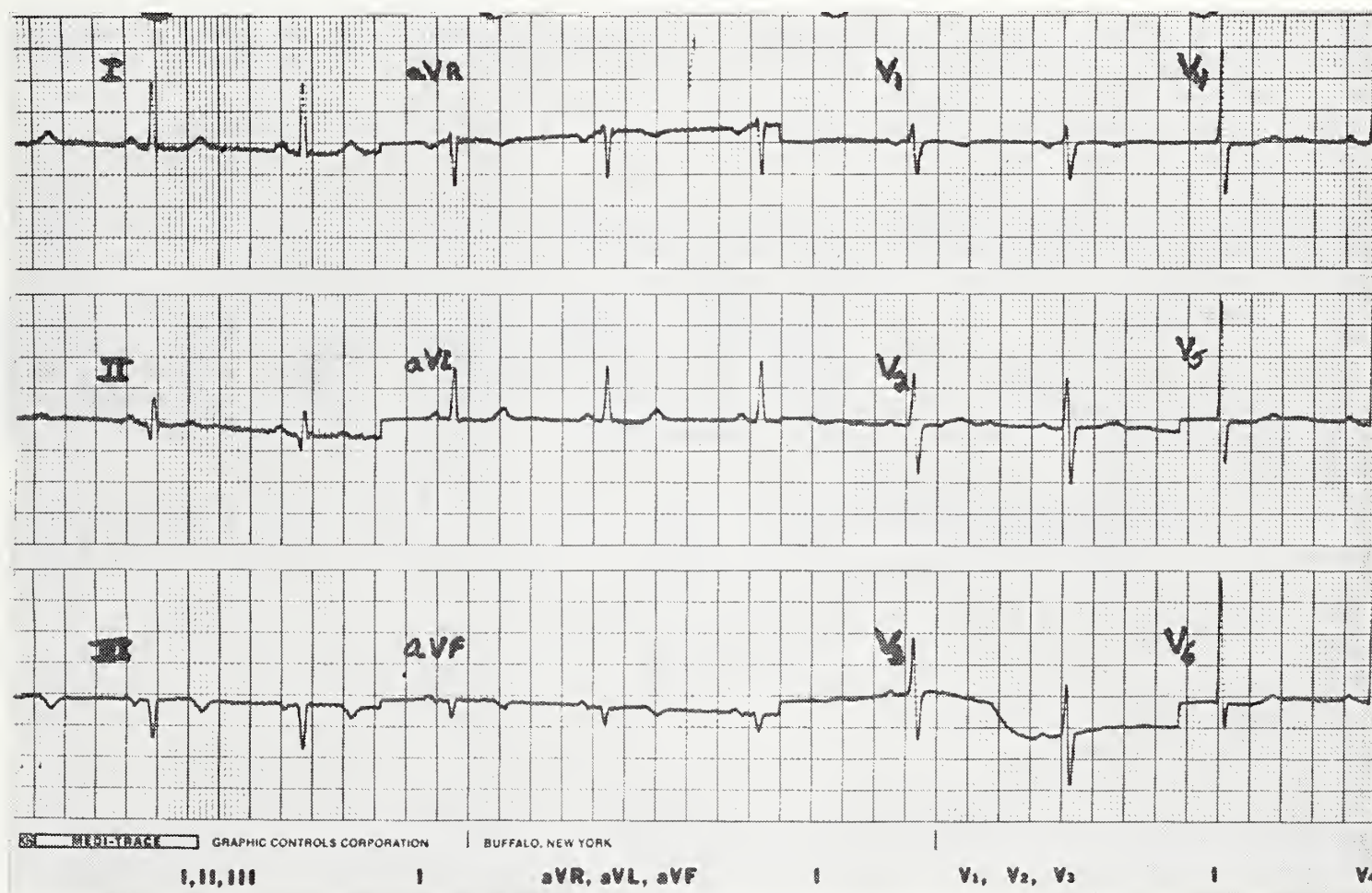


Figure 1

Discussion

The electrocardiogram shows sinus rhythm at a rate of 62 per minute. The PR interval is normal at 0.18 seconds. The P waves are noted to have a duration of 0.12 seconds. The PR segment (in-

From the Department of Cardiology, St. Thomas Hospital, Box 380, Nashville, TN 37202.

ning of the Q wave to the end of the T wave. The QT interval is markedly prolonged at 0.82 seconds. The QT interval will normally vary somewhat with heart rate but should average 0.35 to 0.44 seconds in adults, though it may be shorter with tachycardia or longer with bradycardia. A formula may be used to correct for

heart rate: the square root of the RR interval (in seconds) is divided into the QT interval (in seconds), and the QT interval is considered prolonged if the corrected QT interval is greater than 0.425 seconds.²

QT prolongation is a nonspecific finding, which may be seen with electrolyte disorders (such as hypocalcemia) myocarditis, quinidine or pronestyl therapy, left ventricular enlargement, or it may be hereditary (with or without congenital deafness). Inherited QT prolongation is associated with an increased incidence of sudden death. (It is postulated that the longer time required for repolarization will increase the probability that premature ventricular contractions may occur in the "vulnerable period" and result in ventricular fibrillation.) Hypokalemia may cause flattening of the T wave with development of a prominent U wave. The QU interval is frequently mistaken for a QT interval and is felt to be prolonged. In this electrocardiogram the U wave is prominent in V₂ and is clearly separated from the T wave. In our hospital the most frequent cause of QT prolongation is myocardial infarction in association with left ventricular dysfunction.

Final Diagnosis: (1) Left atrial enlargement. (2) Inferior myocardial infarction "evolving." (3) Prolonged QT interval.

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Hey, isn't that your beeper you just hit away?

Brief Summary of Prescribing Information Combined TEGOPEN® (cloxacillin sodium) Capsules and Oral Solution

For complete information, consult Official Package Circular. (12) TEGOPEN 9/11/75

Indications: Although the principal indication for cloxacillin sodium is in the treatment of infections due to penicillinase-producing staphylococci, it may be used to initiate therapy in such patients in whom a staphylococcal infection is suspected. (See Important Note below.)

Bacteriologic studies to determine the causative organisms and their sensitivity to cloxacillin sodium should be performed.

Important Note: When it is judged necessary that treatment be initiated before definitive culture and sensitivity results are known, the choice of cloxacillin sodium should take into consideration the fact that it has been shown to be effective only in the treatment of infections caused by pneumococci, Group A beta-hemolytic streptococci, and penicillin G-resistant and penicillin G-sensitive staphylococci. If the bacteriology report later indicates the infection is due to an organism other than a penicillin G-resistant staphylococcus sensitive to cloxacillin sodium, the physician is advised to continue therapy with a drug other than cloxacillin sodium or any other penicillinase-resistant semi-synthetic penicillin.

Recent studies have reported that the percentage of staphylococcal isolates resistant to penicillin G outside the hospital is increasing, approximating the high percentage of resistant staphylococcal isolates found in the hospital. For this reason, it is recommended that a penicillinase-resistant penicillin be used as initial therapy for any suspected staphylococcal infection until culture and sensitivity results are known.

Cloxacillin sodium is a compound that acts through a mechanism similar to that of methicillin against penicillin G-resistant staphylococci. Strains of staphylococci resistant to methicillin have existed in nature and it is known that the number of these strains reported has been increasing. Such strains of staphylococci have been capable of producing serious disease, in some instances resulting in fatality. Because of this, there is concern that widespread use of the penicillinase-resistant penicillins may result in the appearance of an increasing number of staphylococcal strains which are resistant to these penicillins.

Methicillin-resistant strains are almost always resistant to all other penicillinase-resistant penicillins (cross-resistance with cephalosporin derivatives also occurs frequently). Resistance to any penicillinase-resistant penicillin should be interpreted as evidence of clinical resistance to all, in spite of the fact that minor variations in *in vitro* sensitivity may be encountered when more than one penicillinase-resistant penicillin is tested against the same strain of staphylococcus.

Contraindications: A history of a previous hypersensitivity reaction to any of the penicillins is a contraindication.

Warning: Serious and occasionally fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin therapy. Although anaphylaxis is more frequent following parenteral therapy it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with a history of sensitivity to multiple allergens.

There have been well documented reports of individuals with a history of penicillin hypersensitivity reactions who have experienced severe hypersensitivity reactions when treated with a cephalosporin. Before therapy with a penicillin, careful inquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins, and other allergens. If an allergic reaction occurs, the drug should be discontinued and the patient treated with the usual agents, e.g., pressor amines, antihistamines, and corticosteroids.

Safety for use in pregnancy has not been established.

Precautions: The possibility of the occurrence of superinfections with mycotic organisms or other pathogens should be kept in mind when using this compound, as with other antibiotics. If superinfection occurs during therapy, appropriate measures should be taken.

As with any potent drug, periodic assessment of organ system function, including renal, hepatic, and hematopoietic, should be made during long-term therapy.

Adverse Reactions: Gastrointestinal disturbances, such as nausea, epigastric discomfort, flatulence, and loose stools, have been noted by some patients. Mildly elevated SGOT levels (less than 100 units) have been reported in a few patients for whom pretherapeutic determinations were not made. Skin rashes and allergic symptoms, including wheezing and sneezing, have occasionally been encountered. Eosinophilia, with or without overt allergic manifestations, has been noted in some patients during therapy.

Usual Dosage: Adults: 250 mg. q. 6h.

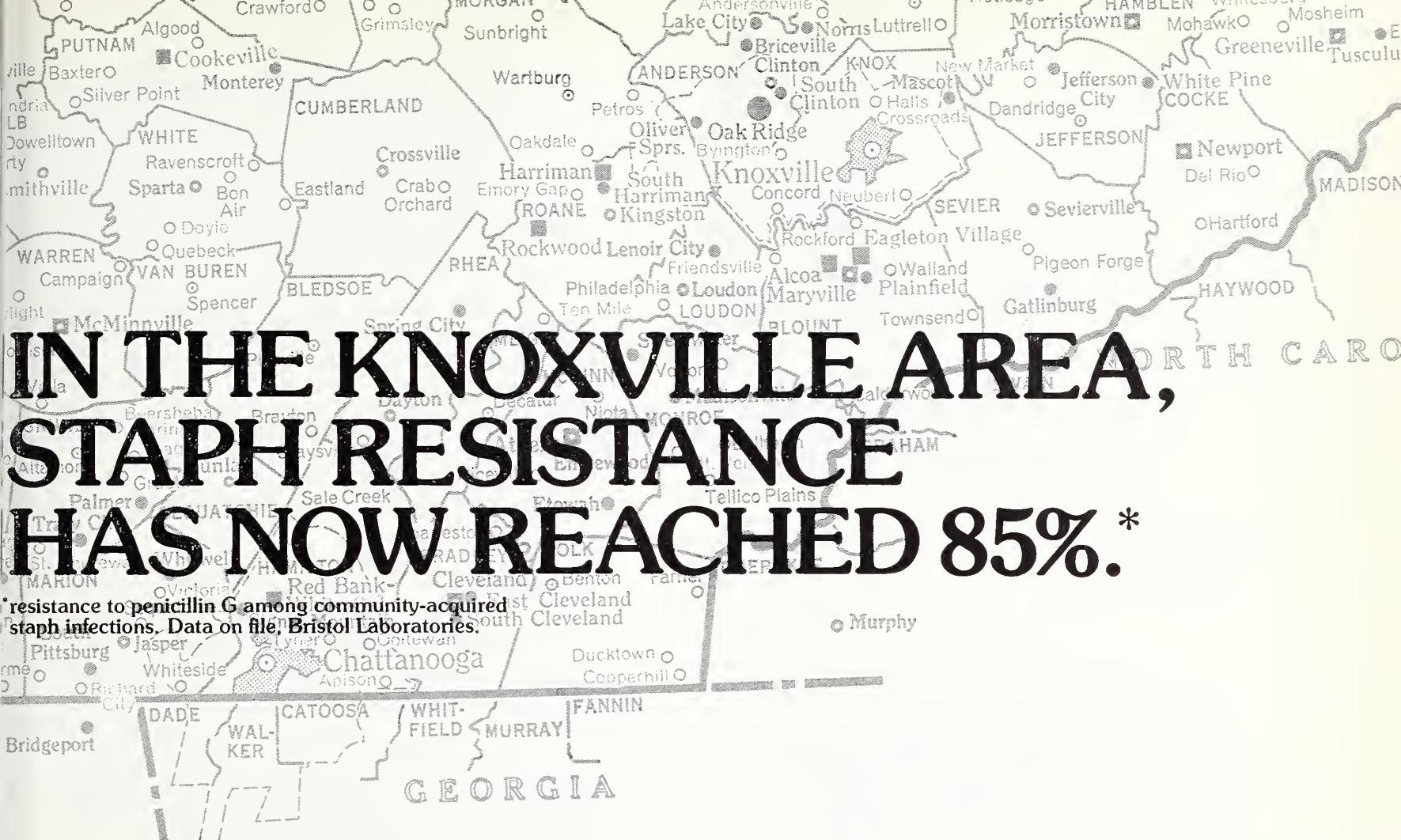
Children: 50 mg./Kg./day in equally divided doses q. 6h. Children weighing more than 20 Kg. should be given the adult dose. Administer on empty stomach for maximum absorption.

N.B.: INFECTIONS CAUSED BY GROUP A BETA-HEMOLYTIC STREPTOCOCCI SHOULD BE TREATED FOR AT LEAST 10 DAYS TO HELP PREVENT THE OCCURRENCE OF ACUTE RHEUMATIC FEVER OR ACUTE GLOMERULONEPHRITIS.

Supplied: Capsules—250 mg. in bottles of 100, 500 mg. in bottles of 100. Oral Solution—125 mg./5 ml. in 100 ml. and 200 ml. bottles.



BRISTOL LABORATORIES
Division of Bristol-Myers Company
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IN THE KNOXVILLE AREA, STAPH RESISTANCE HAS NOW REACHED 85%.*

*resistance to penicillin G among community-acquired staph infections. Data on file, Bristol Laboratories.

WHEN YOU CAN'T RULE OUT STAPH, CONSIDER
TEGOPEN[®]
(cloxacillin sodium)
...THE PENICILLIN OF TODAY"

- Effective against nonpenicillinase-producing staphylococci, beta-hemolytic streptococci, and pneumococci.†

†NOTE: The choice of Tegopen should take into consideration the fact that it has been shown to be effective only in the treatment of infections caused by pneumococci, Group A beta-hemolytic streptococci, and penicillin G-resistant and penicillin G-sensitive staphylococci. If the bacteriology report later indicates that the infection is due to an organism other than a penicillin G-resistant staphylococcus sensitive to cloxacillin sodium, the physician is advised to continue therapy with a drug other than cloxacillin sodium or any other penicillinase-resistant semisynthetic penicillin. The clinical significance of *in vitro* data is unknown.

- 10 times more active against strep than staph.
- Well absorbed from the G.I. tract.‡

‡Maximum absorption occurs when Tegopen is taken on an empty stomach, preferably 1-2 hrs. before meals.



Please see brief summary

HILL CREST HOSPITAL

*For Intensive Treatment
of Psychiatric Disorders*

MEDICAL DIRECTOR:
James K. Ward, M.D.

ADMINISTRATOR:
Robert V. Sanders

HILL CREST HOSPITAL

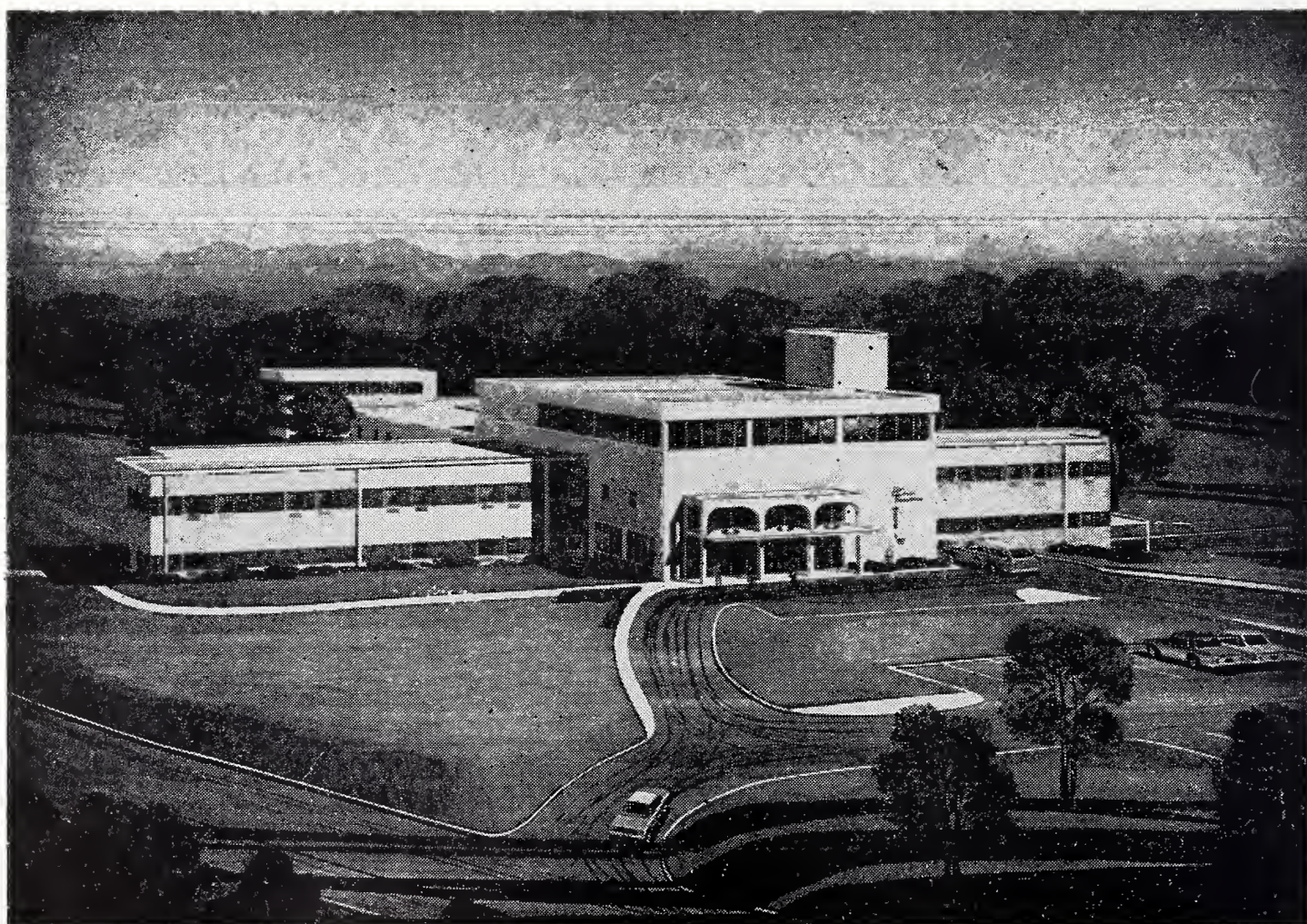
HILL CREST FOUNDATION, INC.
6869 Fifth Avenue South
Birmingham, Alabama 35212
PHONE: 205-836-7201

This 113-bed non-governmental psychiatric hospital provides modern facilities for diagnosis and treatment of patients with all degrees of illness, including those who show severely disturbed behavior. Alcoholic and drug abuse patients are also accepted.

In addition to care by psychiatrists and by consultants in all medical specialties, the treatment program includes occupational, recreational, and physical therapy, social services, and tutoring. Emphasis is on short-term, intensive treatment of voluntary patients.

Hill Crest is a member of: American Hospital Association, National Association of Private Psychiatric Hospitals, Alabama Hospital Association, Birmingham Regional Hospital Council.

Accredited by Joint Commission on Accreditation of Hospitals. Medicare Approved.
Blue Cross Participating Hospital.



New State Law to Aid Immunization Efforts


The 1978 session of the Tennessee General Assembly enacted a new statute designed to help ensure that Tennessee's children are protected from major childhood diseases. Public Chapter 922 amends the state's immunization law to require that, beginning July 1, 1978, all children attending any public school, kindergarten, nursery school, preschool or day care facility must present proof of immunization. The law previously required immunization to *enter* public school. The amendment requires immunization for all children in all grade levels of public schools, and carries with it a penalty: students who are not immunized according to the law cannot be counted in the average daily attendance for distribution of state school funds.

The Departments of Education and Public Health have begun implementation of the new law in cooperation with local school systems and the state Parent-Teacher Association. Efforts are underway through news media and various community groups to inform parents and students of the new requirements. Staff of Education and Public Health are finalizing implementation plans in an effort to assure that the first year of the program goes smoothly.

Preliminary plans call for the forms to certify that a child is legally immunized to be very similar to those currently in use for school entrance. Only the dates of the last dose of neces-

sary vaccines received will be required in order to minimize time spent on documentation. Public health departments are being alerted to the need to respond with extra efforts, i.e., additional clinics, to handle the expected increase in immunization requests during the summer and early fall. School superintendents are also being alerted about the new requirement and plans for implementation.

Education and Public Health staff expect the most extensive impact of the new law to be felt this year, of course. After the initial effort to bring immunizations and records up to date, the yearly effort should be much less extensive. In addition, the immunizations required to be "legally immunized" will represent a minimum standard that will protect the majority of the school age population from major diseases of childhood: diphtheria, pertussis, tetanus, rubeola, rubella, polio. Individual physicians and health departments may recommend additional immunizations for particular patients. Details of the legal requirements and the certification forms will be communicated to physicians, schools, and health departments in the next few weeks.

The achievement of a properly immunized school population will require the cooperative efforts of the medical community, state officials, school systems, parents, students and local communities. But with the effective implementation of the new law, Tennesseans will have taken major steps toward the elimination of many vaccine-preventable diseases through a high standard for level of immunizations. 

From the Tennessee Department of Public Health, Nashville.

Role of the Developmental Disabilities Council

The Developmentally Disabled Assistance and Bill of Rights Act provides for a state planning council to serve as an advocate for persons with developmental disabilities. The term "developmental disabilities" denotes disability attributable to mental retardation, cerebral palsy, epilepsy, autism, or other neurological handicapping condition of an individual found to be closely related to mental retardation or to require treatment similar to that required by mentally retarded individuals.

The disability must have originated before the individual became 18 years of age, and it must have continued, and can be expected to continue, indefinitely. It must also constitute a substantial handicapping condition for the individual.

In Tennessee, the members of the Developmental Disability State Planning Council are appointed by the governor and include representatives of the principal state agencies, local agencies, nongovernmental agencies, and groups concerned with services to persons with developmental disabilities.

At least one third of the council membership must be persons with developmental disabilities or be parents or guardians of individuals who are developmentally disabled.

The Tennessee State Planning Council has an executive committee and various task forces which serve to coordinate activities in areas including public health, education, human services, legislation, and mental health. Each member of the council serves with at least one task force.

The council really has three major responsibilities. Public Law 94-103 lists 16 services which are considered significant to the developmentally disabled. They are diagnosis, evaluation, treatment, personal care, day care, domiciliary care, special living arrangements, training, education, sheltered employment, counseling, protective and socio-legal services, information and referral, follow-along, and transportation.

It is the council's responsibility, in conjunction

with other agencies, to determine the role the state must play in the delivery of these services. The council must further determine what provisions agencies are making for services and what resources are being used by these agencies. A very important focus of the Tennessee State Planning Council has been to identify gaps in services and provide for services to augment these gaps.

In its role as advocate on behalf of the developmentally disabled, the Tennessee State Planning Council has focused on several programs. One project is the Tennessee-Peabody Referral and Information Office. This office operates a 24-hour call-in for service system whereby developmentally disabled persons, parents or guardians, physicians, and/or other persons in a position of care-giving may seek information concerning the availability of programs.

The purpose of the referral and information office is to link developmentally disabled individuals with agencies offering appropriate services and follow-up and follow-through services. Information is available on request. Write or call collect Tennessee-Peabody Referral and Information Office, Box 40, Peabody College, Nashville, TN 37203; Tel. (615) 327-8216.

In addition, under the council's direction the Office of Developmental Disabilities, Tennessee Department of Mental Health and Mental Retardation, publishes a directory of services. Interested individuals may obtain a copy by writing the referral and information office listed above.

A chief priority of the council has been the development of an information system which would facilitate better planning and services. An individual data bank is being compiled which can become a useful tool for matching the client to the appropriate services.

It is the function of the Developmental Disabilities Council to set the direction and the pace of growth through its work in planning and evaluation. In Tennessee, it is the goal of the council to insure that every developmentally disabled person is receiving appropriate services to help him lead a life in keeping with his capabilities.

From the Tennessee Department of Mental Health and Mental Retardation, Nashville, TN 37219.

1978 Public Chapters Affecting Medicine

C. DAVID MORISON, J.D.

The following list synthesizes 1978 enactments of the Tennessee General Assembly which have a potential direct impact on medical practice. The analysis is informational only, and no attempt was made to completely summarize each law. If the synopsis raises any questions, please consult your local counsel or contact the Association.

Public Chapter 527—Permits one licensed clinical psychologist with three years' practice experience and one physician to make the certifications necessary for an emergency mental health commitment, if all reasonable efforts have been made to locate another physician in the county and one cannot be found to examine the patient within eight hours.

Public Chapter 539—Prohibits false statement, concealment, or fraud by patient, or on behalf of patient, in order to obtain Medicaid payments to which he is not entitled, a felony punishable by one to three years' imprisonment and a \$500 fine plus recovery of benefits paid.

Public Chapter 549—Extends the date for issuance of contracts of insurance by the Tennessee Temporary Joint Underwriting Association to July 1, 1979.

Public Chapter 566—Establishes offense of conspiracy to manufacture, deliver, sell, or possess controlled substances (drugs).

Public Chapter 576—Medical Malpractice Review Board amendments were proposed by TMA to transfer the Board from the Department of Insurance to the Department of Public Health, to require the courts to report the final disposition of malpractice cases, to insure that a consumer will always be on the review panel, and to modify fees.

Public Chapter 628—Permits the Board of Medical Examiners to promulgate rules and regulations. Facilitates discipline of the profession and places the Board on an equal footing with other health-related boards.

Public Chapter 630—Eye Enucleation—permits removal of eye tissue in conjunction with autopsies if next of kin gives consent by telephone.

Public Chapter 661—Permits circuit, probate and county courts to correct errors on birth certificates.

Public Chapter 678—Permits nursing graduates from other states to work in Tennessee pending results of their Tennessee licensing examination.

Public Chapter 734—Abolishes requirement that medical or hospital bills be proven necessary and reasonable so long as they do not exceed \$500.

Public Chapter 742—Extends Statute of Limitations for wrongful death actions to a fetus viable at time of injury. Under prior law child must be born alive. Permits recovery for death of fetus as the result of an injury during pregnancy if the fetus was capable of living outside of the uterus.

Mr. Morison is staff attorney, Tennessee Medical Association.

at the time of the injury. The issue in such suits will revolve around expert testimony to determine the "viability" of the fetus. A TMA amendment to Public Chapter 811 bars such wrongful death actions for a fetus dying in the course of a lawful abortion.

Public Chapter 748—Prohibits discrimination against an individual because of race, creed, color, religion, sex or national origin in employment or public accommodations; establishes Tennessee Commission for Human Development; excludes private club membership; requires offenders to take affirmative action ordered by the Commission to correct discrimination.

Public Chapter 796—Requires Department of Public Health to coordinate state inspections of health care facilities to avoid duplication of inspections; requires the Department of Public Health, the Health Care Licensing Board, the Health Facilities Commission, the Nursing Home Licensing administrator and any hospital authority to conduct one joint inspection for each license period or accept the inspections of other agencies. Hospitals accredited by the JCAH or certified under Title 18 of the Social Security Act are exempted from Department of Public Health inspection. Becomes effective January 1, 1979.

Public Chapter 811—Requires persons performing abortions to treat infants "prematurely born alive" in the course of an abortion with same care to preserve life as infants born normally. Such infants are declared abandoned and become wards of Human Services Department. State funds to be used in treatment of such infants is limited to \$50,000.

Public Chapter 815—Provides for a hearing under the Administrative Procedures Act prior to staying a Licensing Board decision to revoke or suspend a license, while the case is appealed to Chancery Court. If the stay would expose the public to irreparable injury due to the licensee's conduct, it could be denied and the licensee could not practice his profession pending appeal.

Public Chapter 818—HMOs may be funded by state grants of funds so long as the grants consist entirely of federal funds.

Public Chapter 847—Establishes informed consent procedure for abortions; requires physicians

to inform the patient:

- (1) she is pregnant;
- (2) the number of weeks elapsed from conception;
- (3) if more than 22 weeks have elapsed the child may be viable, and if so the physician is legally obligated to treat the child;
- (4) abortion is a major surgical procedure;
- (5) there are numerous agencies available to assist her in placing the child for adoption if she chooses not to have an abortion;
- (6) there are numerous benefits and risks attendant to abortion or continued pregnancy and explain them to the best of his ability as well as the particulars of her treatment. After signing the consent form, the patient must then wait two days to digest this information prior to the performance of an abortion. The patient is to receive a duplicate of the form.

A TMA-supported amendment clarifies language on the physician's duty to treat infants "prematurely born alive" in the course of abortion.

Public Chapter 853—Requires all facilities providing mental health or mental retardation services for more than three persons to be licensed by the Department of Mental Health and Mental Retardation. Requires unannounced annual inspections.

Public Chapter 877—Authorizes convulsive therapy for minors 14 to 18 years old prior to a hearing in emergency life-threatening situations. Provides for state to assume cost of hearing.

Public Chapter 881—Upon assignment of benefits of a health and accident insurance policy to a hospital or health care agency by the insured, the agency shall be paid the benefits and the agency shall provide the insured a monthly statement of services rendered and payments received.

Public Chapter 886—Permits child abuse reports by hospital staff personnel to be made to the person in charge of the hospital instead of the sheriff.

Public Chapter 922—Prohibits admitting children to public school, nursery school, kindergarten, preschool or day care facilities without proof of immunization given to the admissions officer, unless medically excused by the child's doctor.

Gubernatorial Candidates Speak Out

The Middle Tennessee Medical Society invited the 1978 gubernatorial candidates to address its members at a luncheon held at its semi-annual meeting on May 25 at the Stones River Country Club in Murfreesboro. Five candidates and one surrogate appeared. Each made a five-minute presentation and then there was a lively question-and-answer period. The candidates were invited to submit their remarks for publication in the JOURNAL. We received four manuscripts, and one letter, which follow.—ED.

Lamar Alexander



For the past four months, I have been walking across Tennessee. I have been meeting and talking with thousands of Tennesseans—seeing people and hearing about problems and

local concerns that most candidates for statewide office never see or hear.

I have walked nearly 800 miles now, and I expect to finish my walk around the first of July in Memphis. But this morning I put my “X” down on the road near Spring Hill, after I visited a high school there, because I wanted to come and meet with you and share some of the things I have seen and heard.

I am talking with a lot of older Tennesseans, and a lot of people who don’t live in the big cities but live in the rural areas of Tennessee. They are worried about the high cost of living, such as the high electric bills they are paying these days, and the other things they must have to live.

You are directly involved in the way Tennesseans obtain health care, and as you know the cost of care, particularly for Tennesseans who live on fixed incomes, can be a real problem. Sometimes it is hard for them to obtain care where they live.

There are some 5,300 medical doctors in Ten-

nessee, but as you know that does not tell the whole story.

I have walked through eight counties where there are fewer than five physicians to serve the entire county. Statewide, there are 28 counties that have fewer than five doctors, and five counties have only one.

We have the best system of health care in the world, and the challenge we will face in the coming years will be to see that all Tennesseans have the benefit of it.

The major opportunity for you professionally, and the major opportunity for the state government, is to make sure that older people, poorer people and the people who live in the rural counties receive adequate care.

There have been many proposals at the national level to enact some form of national health insurance. The fact is that about 95% of the people already are covered by some form of private insurance or government health care programs.

I believe it is important, as we try to find ways to improve the delivery of health care to Tennesseans, that we do not injure what has become the finest system of health care in the world.

I did not agree with the President when he said the other day that you are “the major obstacle to progress in our country to having a better health care system.” He was wrong. He seemed to ignore the contributions you have made, and the contributions you and your profession are making, toward better health care for more Americans.

In fact, doctors have participated significantly both in improving the health care of Tennesseans

and in efforts to hold down the cost of care.

I hope to have your suggestions on what state government can do to further those same goals. Your ideas and your leadership are essential, and I will welcome your help.

Bob Clement



You and I are here today because we share a common goal and a common concern.

You who practice the healing arts are dedicated to improving the lives of the men, women and children you serve, with the aid of advanced technology and research.

My goal in public office, and in this governor's race, is to have the opportunity to utilize the tolls of government to improve the lives of the men and women and children of Tennessee.

We serve the same people. Our goal is the same. Our concern today is that state government too often impedes us in our goal. We can no longer permit unnecessary interference in the effective, efficient delivery of health care services to people in every county of Tennessee.

The role of state and federal government is to support you and the people you serve. The role of state and federal government must be to encourage and foster your efforts, and it must encourage and foster your profession as a part of the free enterprise system rather than as a part of some big brother system.

Our campaign for governor has called for a new direction in Tennessee. That new direction will be extended to those departments and boards of state government that deal directly with the medical profession. We will extend to you a helping hand through the department of public health in the administration of Medicare and Medicaid programs, rather than the oppressive, restrictive hand of state government.

We offer that new direction because I am convinced that any lack of action, speed and accuracy on the part of state government can result in a tragic loss of time for your patients, who have placed their faith in their physicians and their governor.

Service will be the order of the day, and efficiency will be the standard of excellence in my administration. We will listen to you, we will seek your input concerning the most effective methods of service. We will do it informally, through active involvement in conferences such as this, we will also seek your advice and counsel on a formal basis. Formally, through the state's six health systems agencies, where the role of the physician must be increased and reinforced.

We will also take a common sense approach to the administration of health care programs in our state. Principally, this will involve close coordination between the various federal, state and local programs. We now have a shortage of health care facilities and doctors in many counties in Tennessee. With that in mind, it doesn't make good sense to me to open a federally subsidized health care facility across the street from an established physician. It is that type of duplication, and unthinking action, that has reduced our confidence in government doctors, patients, and voters . . . off in the past.

In addition to working with you through state government, we will also ask your direct involvement and help in many areas. From 1965 to 1975 the cost of a stay in Tennessee hospitals rose nearly five times, from \$29 a day to \$140 a day. State government needs your advice, your active involvement in solving that problem, for it will place health care out of the reach of average families in Tennessee if it continues, and it will ultimately lead to more and more government involvement in your profession, which neither of us wants.

We must also face and solve the problem of those counties in Tennessee which do not have enough doctors. I believe that the most effective solution to that problem is to encourage the further development of family practice programs in our medical schools. A very high percentage of the graduates of these programs are willing to locate in our rural areas, which face the most critical shortage. But, before we implement such a program as that, as governor, I want your input, your advice, your experience, as a part of the decision.

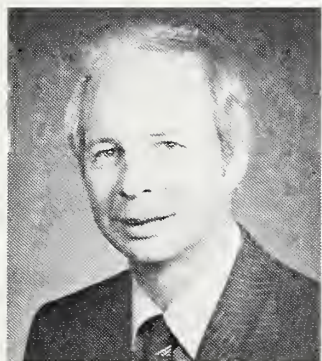
And, in conclusion, I come here as a candidate and as one who must rely on your professional judgment as a private citizen, and I urge you in this room, and your colleagues all across this state and nation, to accept a challenge.

That challenge is for you to look inward, and

for you to urge your profession to increase its levels of self-regulation. No one in business or government knows as you know what the problems and weaknesses of your profession are. You must take a fresh look at your profession to determine how it can better fulfill the goal we discussed earlier, just as you expect us in government to take a fresh look and offer new programs and better service to you and to the public.

I know you and your colleagues are men of goodwill, and I come to you as a candidate for governor, with goodwill and good faith, with the belief that by recognizing that ours is a common goal and a common concern, we can do much together to make of a great Tennessee a greater Tennessee.

Roger Murray



(Mr. Murray responded that he was unable to submit his address, but we quote from his letter.)

"My remarks were made extemporaneously, but the thrust of my talk was that we had better take a real hard look at the direction which the medical profession is taking toward socialized medicine and do something about it rather than just talk."

Harold Sterling



(In comments before delivery of his speech text, Mr. Sterling told the physicians that in 1976 he authored the GOP convention plank opposing national health insurance.

The four-term state lawmaker also said that as a member of the House Commerce Commit-

tee he became familiar with the problems doctors have in obtaining malpractice insurance.

"There is still more that needs to be done to control the cost of malpractice insurance," Sterling said.)

The time has now come when a total commitment is needed. The American people in general, and the health care professionals in particular, must now act to assure that future generations have the same superior health care that we now enjoy. Tennessee desperately needs more physicians and other health care professionals in positions of administrative and legislative leadership.

You are needed to help reverse the trend toward socialized medical services. While the main move in this respect is at the national level, there is also much movement in this direction at the state level, and if this trend continues, the high quality of health care we now enjoy is in grave danger. The British experience is a clear example, as detailed in an article in *Human Events*, April 29, 1978.

Since Britain established the National Health Service in 1946, construction of hospitals has come to a virtual halt. As a result, 70% of British hospitals are pre-World War II vintage; thus, 70% are more than 40 years old, more than half of which were built before the beginning of this century.

Nearly three quarters of a million Britons are on waiting lists for medical attention. When a patient does get to see a doctor, the average length of the visit is less than five minutes. There is usually not enough time for the patient to undress, or for the doctor to make an adequate diagnosis. Elective surgery meets with delay after delay—frequently year after year—until, for one reason or another, the surgery is often no longer needed.

Doctors' salaries in Britain are only about three times those of unskilled laborers, resulting in some 4,000 young doctors leaving Britain each year.

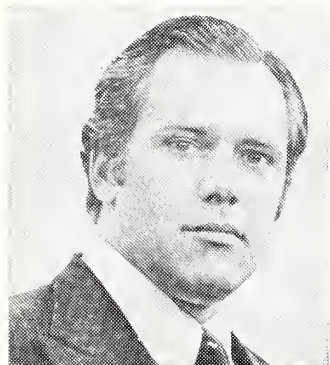
As a result of these things, rationing of health care has occurred. True to the claims of its supporters, nationalized health care in Britain costs only about half that individualized health care in the United States. But consider, if you will, unseen costs that the British pay in pain and suffering. Let us not forget the nonmedical bureaucracy that administers the National Health Service which is already 30% larger than the number of practicing physicians. In 1965,

the administrator to hospital bed ratio was 1 to 10. Today the ratio is 1 to 5. Since 1965, about 100,000 nurses have been added to the British system. But there has been no relief in the critical shortage of adequate health care. All of the nurse additions were absorbed into "administration" rather than patient care.

In spite of these devastating statistics, American social engineers continue pushing for socialized medicine for our citizens. Just as Tennesseans lead a national ground swell to limit government spending that began with the public amendment of Tennessee's constitution, it must *now* be Tennesseans who put the brakes on efforts to socialize our health care system. We cannot afford the increased cost of decreased services that socialized medicine brings.

It is health care professionals and practitioners who are best qualified to provide input and energy as we all strive to maintain the high standards of American health care. I ask you now to join with me when I am elected governor to help put the brakes on efforts to socialize our health care system.

Shelley Stiles



I entered the race for governor because I firmly believe Tennesseans want new leadership and a new direction in their government.

As a staff aide to the governor in a previous administration, one of my responsibilities was to work on legislative and policy matters with Commissioner Fowinkle in the department of public health. In that capacity, I reviewed or drafted all department of public health legislation. Some areas, among others, which concerned me then as well as now included rural health care, newborn clinics, senior citizen centers, and bureaucratic rules impeding timely health care.

With over 65% of the doctors in Tennessee located in four cities there is an urgent need to provide medical care and assistance in rural areas. One program which has helped to allevi-

ate the low level of medical care in rural areas is the Primary Health Centers Program. As you know, this program is designed to bring preliminary medical assistance to Tennessee's vast rural areas. I have worked with physicians in attempting to establish such medical centers. In addition, I support the objective of attracting doctors to a rural practice. This would mean a program which provides the necessary facilities to accommodate a physician's desire to provide quality patient care.

Because of a personal experience with my youngest son, Marshall, I am acutely aware of the excellent work performed by newborn clinics—in particular, the Vanderbilt Newborn Clinic. My son spent 16 days there immediately after his birth. Children survive and lead productive lives because of the fine work performed by these clinics. I would favor increased state support of such clinics throughout the state.

There is a growing number of senior citizen centers across the state of Tennessee. I believe that there should be a medical assistance program which works in conjunction with these senior citizen centers. These medical programs could provide information and diagnostic services for senior citizens.

As a staff aide in a former governor's office, I wrote the Tennessee Administrative Procedures Act. While drafting such act, it became very clear to me that a number of agency rules actually impeded the timely provision of health services. Some departments caused unnecessary paperwork for doctors which deprives them of time which could otherwise be devoted to medical care. I favor a review of state rules to determine where such rules may impede, rather than foster, timely health care.

If you find a mistake in the JOURNAL, please consider that it was put there for a purpose. We try to publish something for everyone, including those who are always looking for mistakes.

The Ghost of Freedoms Past

*As a first class citizen, I'd rate
I've paid my taxes, pulled my weight,
Kept my conscience free from sin
Gone to church . . . least now and then.
With little leagues, I've learned to play
I've suffered hours of PTA,
I've paid my bills, observed the laws
And given to many a deserving cause.*

*But politics was not my dish,
I'd rather golf, or hunt, or fish,
When I was asked by Mr. Pate
Would I support his candidate?
I said I'd sent a prior check
'Twas all a lie . . . but what the heck,
When called to work for Senator White
I said my schedule was too tight.*

*When precinct meetings rolled around
I said that I was leaving town,
When Party help was needed now
I said, "They're all crooks, anyhow."
Then when it came the time to vote
I spent the day out in my boat,
And life rolled on, day in day out,
About my future, I'd no doubt.*

*Then one night while dreaming fast
I met the Ghost of Freedoms Past,
He led me from my snug, warm bed
To show me things that lay ahead.
He showed me faces, thin and bleak
On folk who toiled through endless week,
Meeting quotas, reaching goals
Living under strict controls.*

*He showed me children reared by State
Whose aim was to indoctrinate,
Empty churches stood forlorn
Worship outlawed, buildings torn.
The Halls of Congress sealed by rust
Ballot boxes collecting dust,
He showed me life where fear was norm
And all were clad in uniform.*

*He said when scientific tests were made
My kids had been assigned a trade,
Their lives a drudge, a menial chore
They could aspire to nothing more.
I'd been assigned . . . he then decreed
To clinics where there was a need,
I'd have a bed and board and clothes
With coupons to exchange for those.*

*For such I'd file a six-part claim
But sign my number, not my name,
And serve each day without complaint
The State had now become my Saint.
I pleaded then, "It can't be true
There must be something I can do,"
He sadly paused, and then he said
"My friend, Democracy is dead.*

*There's just no way for legal fights
The Courts are closed, and you've no
rights,
You had a chance in seventy-five
To keep that marvelous thing alive.
You simply said 'The job's not mine'
Now this is nineteen-eighty-nine,
For all the world, you didn't care
While there were others waiting there.*

*To call your life style to a halt
You lost your freedoms by default,
You gave it up just inch by inch
Those activists . . . they had a cinch.
So here it is, no hope no joy
Don't cry on me . . . you blew it, boy!"
And just then, I awoke in sweat
But I recall that nightmare yet.*

*Of life, with which I could not cope
Devoid of dreams, devoid of hope,
Devoid of warmth, devoid of love
Devoid of guidance from above.
I saw the error of my ways
And I will spend my lasting days,
Preserving all that we can be
A nation proud and strong and free.*

*And like my forebears in the strife,
I'll pledge my honor, fortune, life,
I'll hold my right to vote most dear
And with it, keep your future clear.
I'll work and give . . . support, oppose
This land won't fall to some of those,
Who want things I saw that night
Who feel that socialism's right.
This was my lesson. It will last.
Learned from the Ghost of Freedoms Past.*

*Rex Kenyon, MD, Chairman
AMPAC Board of Directors*

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The Doctors and Alcoholics Anonymous

JOSEPH G. BURD, M.D.

Criticizing the medical profession has become a great American spectator sport. The President to the least knowledgeable participate with impunity. These folks are unburdened by facts, which of course is an indifferent factor.

A group called Alcoholics Anonymous (AA) criticizes the medical profession in a sympathetic, wistful vein. AA wishes for more participation and help from the medical community. AA extends a loving hand to the professional with a drinking problem. A spin-off of my increased leisure time is the chance to visit and participate in some of their programs. As a doctor you are welcome. To all others a closed meeting means closed meeting.

I wonder if the monumental ego of many doctors would accept the failure of the pharmacy, skills of the psychiatrist, and surgeon's knife. Could the internist accept the failure of his drugs? Could our scientific training accept the need for a power greater than ourselves that some call God? Could the serenity prayer do a better job than Thorazine? The answer to these rhetorical questions is, yes, sir—if he knew the program.

Last but not least (cliché), the alcoholic is sick with an addiction compulsion problem. The corollary of this is that all alcoholics are not in the drunk tank in the pokey. Many of our patients, colleagues, and friends live quietly in their personal hell.

It is true that the alcoholic has an emotional

problem; he also has a physical problem. The mind is affected. The alcoholic becomes the most accomplished of liars. He has no peer as a buck passer. He becomes less and less selective on whom to place the blame for his failures.

So what is Alcoholics Anonymous? It is a heterogenous group of probably the happiest and most grateful people in this mixed-up world of ours today. To become a card carrying member of AA you must first be an admitted alcoholic and then make a real effort to follow the 12 steps of recovery. AA avoids all alliances, public controversy and endorsements. Each group is autonomous. There is no professional therapy.

So there it is. If you go to a meeting, bring a dollar to pay for the room, coffee, and cokes. You may have to wash the coffee cup you use. Do not offer more, as the rule forbids grants, donations, etc. It must be self-supporting. It is not a fad, a cult, or a social organization. It is a group of people saving their peace of mind and heart by escaping a dangerous chemical. They help others do the same (12th step).

The doctor sees the alcoholic in various shapes, colors, and backgrounds. If I were in Tom Nesbitt's shoes (our AMA President) I would give an hour's credit for attendance at an AA meeting (these meetings last one hour).

Try it; it will be good for you.



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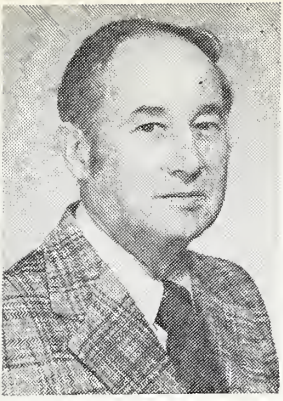
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JOHN B. DORIAN

president's page

ensuring . . .

"... but what's a body to do?" This plaintive query from the old TV commercial might be analagous to the frustration physicians face in the medical liability crisis. How can we render quality care, reduce our liability risk, and, at the same time, maintain the highest level of ethical behavior?

First the "why" of the crisis, and then the "how resolved" should be considered.

It's my opinion that attorneys and the laws they define and represent in court are not the basic causes. The two basic causes of the crisis are a suit-conscious public, and the extraordinary results the patient expects in medical treatment. I emphasize the crisis, because there will be no elimination of medical liability. The crisis can be eliminated; liability cannot, simply because it involves people dealing with people.

The suit-conscious public has not selectively sued physicians. To be sure, we are a prominent target, but, in the last ten years, all service-oriented activities have been increasingly brought to court for satisfaction for real or alleged wrong. This atmosphere has spawned the frivolous, or nuisance, suit.

Attorneys may also aggravate the crisis. However, again, they don't cause the crisis, nor do laws. It is estimated that less than 10% of attorneys even consider that type of practice.

The second cause is the result expected. Patients are more educated about medicine than ever before, and that is good. They read of the marvels of medical research and technology. As human nature will have it, each patient transfers that information to his personal needs, ignoring the inherent risks in caring for the human machine, and anticipates perfection routinely. Alas, the resultant less-than-perfect outcome indicates to him that someone erred. And, so to court.

The crisis can and must be eliminated. The suit consciousness has already begun to moderate. The patient is beginning to realize that the patient pays for all suits, ultimately. The frivolous law-suit is the area where I feel we in the profession should be much more active.

The best system yet devised for dealing with the nuisance suit is a pretrial hearing which insists on objectivity. Many states have no arrangement. In Tennessee, it is conducted by medical malpractice review boards.

The law creating the Tennessee review boards has been in effect three years as of July 1, 1978. Five hundred forty-three cases have been referred to the Board during this time. Significantly, of this number, 234 were settled before the hearing. Of the 245 hearings held (as of March 31, 1978), 47 were found by the Board to have some merit. All heard can still proceed to court, and the outcome is impossible to determine now, as is the ultimate worth of the review board concept. But, 234 filed suits will not proceed to court, and that's a positive result for patient and physician.

From the profession's standpoint, we must remove the impaired and the incompetent from private practice. Our efforts will be intensified this year.

The individual practitioner must accept the philosophy that no one is immune to suit. Accordingly, he must be aware of the potential. He must continue to practice quality medicine, even if he's accused of practicing defensive medicine. There is negligence in not prescribing needed tests; conversely, unneeded, but ordered, tests are no defense. The answer is in judgment.

The physician can further reduce his potential personal crisis by:

1. Confining his practice to his demonstrated area of competence.
2. Being aware of the total needs of his patient, being supportive, empathetic, and avoiding the temptation to be deified.
3. Promoting efficiency of personnel in areas of patient contact and recordkeeping.
4. Providing, suggesting, and encouraging consultation where the slightest indication exists.
5. Being aware of the type of patient and the type of situation likely to produce difficulty.
6. Being realistic with the patient in expected outcome, and straightforward in apprising him of an untoward result.

Ensuring completely against a suit is impossible for the practitioner; the above will make the suit less likely.

Sincerely,

John B. Dorian, M.D.
PRESIDENT

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JULY, 1978

editorials

That Oh, So Delicate Balance: The USA at 202

The body, said the Psalmist, is wonderfully and fearfully made, and one of the most marvelous of all its parts is the immune mechanism, which protects the body against the assault of all sorts of dread agents inhabiting the microscopic world around us. All you have to do is block it or take it away, as we sometimes deliberately do, to find out how dependent we are on it. If

it weren't for antibiotics, an immune-deprived body would last no time at all.

This marvelous system couldn't possibly do us wrong, could it? Or could it? It could, and it does. There is a host of diseases traceable to the hyperimmune state—too much immunity, or perhaps better, a too active system. In our medical practice, we are faced with choices, often between two evils, as we manipulate the system. The trick is to choose the lesser evil, trying to keep our asthmatics breathing or our cancer patients alive, and so on.

The body is a delicately balanced organism and, although it can stand a lot of aberration and tinkering, its homeostasis is a fragile thing, to be enjoyed and marveled over—a thing to praise God for. But sooner or later we die.

The other day a riot broke out in the Davidson county workhouse. A guard was badly beaten and narrowly escaped being killed with a knife, escaped, in fact, only because two inmates came to his rescue. Stories naturally differ, depending on who was asked, but 39 inmates and the guard were injured, some badly. The DA charged unnecessary force was used. Perhaps so. But our laws now favor the criminal and penalize the law-abiding citizens, among them the law enforcement officers. The struggle goes on in our courts and throughout the nation. When does protection become repression? Which is more dangerous—pornography or censorship? The CIA and the FBI or subversive elements and spies? And so it goes. The pendulum swings back and forth, as we try to steer a safe course through the treacherous, narrow shoals between the Scylla of the fascist police state and the Charybdis of anarchy.

In a recent issue of the *National Review*, James Burnham, considering the wave of terrorism currently troubling the world, points out that for the last five years the United States has been stripping away its organizational, legal, and ideological defenses against terrorism. To combat these absolutely disciplined underground terrorist organizations, police state tactics are necessary, "effective use of which has been made impossible on the grounds that they violate due process, privacy, and democratic rights in general." He goes on to say that there is an inescapable dilemma. At such a time as we are now in, "a nation cannot defend itself successfully against terrorism and at the same time enjoy in full measure the rights and privileges of democratic citizenship."

Mircea Simone is a boxer. He is an ex-Rumanian boxer. Mircea Simone is a defected Rumanian boxer who now lives in the United States. He planned his defection for a long time, and finally he was allowed to come to the United States to fight on the Rumanian boxing team. He never went back. When asked why he wanted to leave Rumania, he said there is no freedom there of any kind. There is total security, with no escape. He said, "I am very happy to be here. God bless America!"

The line between repression and protection is thin indeed, whether we are talking about the body individual or the body corporate. I find as my body gets older, it has to give up some of its freedoms. To keep it alive and mobile, to protect it, to survive, I have had, for example, to stop giving it all the food I want, and I have to exercise it, though I am by nature *very* sedentary. Unbridled liberty is not liberty at all, but license. It is fatal. I must maintain that delicate balance. And so must the state.

We need our law enforcement agencies and counterintelligence forces to protect us from terrorism, from organized crime, and from espionage, all of which are flourishing as we demoralize our peace-keeping forces. But our worst need is to discipline ourselves individually; this is our real strength.

Democracy—the republic—is a delicately balanced organism, and, although it can stand a lot of aberration and tinkering, freedom is a fragile thing, to be enjoyed and marveled over—a thing to praise God for. But sooner or later. . . .

I pray for our country that the analogy ends there, and that we can all continue through the years to say with Mircea Simone, "I am very happy to be here."

God bless America!

J.B.T.

An Election Selection

In his commencement address to the 1978 Harvard graduating class Alexander Solzhenitsyn castigated Western civilization for having cowardly leaders. "The Western world," he said, "has lost its civil courage. . . . Such a decline in courage is particularly noticeable among the ruling groups and the intellectual elite, causing the impression of loss of courage by the entire society." He went on to say that the leaders deal sternly with weak governments who cannot offer resistance, but become "tongue-tied and para-

lyzed when they deal with powerful governments and threatening forces, with aggressors and international terrorists."

Them's hard words. But the record offers little solace. Western leaders as a whole have chosen to follow George Kennan's evaluation of the Soviet leaders as "quite ordinary men," and Brezhnev as "a moderate man, a man confidently regarded by all who know him as a man of peace." Again, we need only look at the record, as, according to Richard Pipes of Harvard, it was Brezhnev who "invaded Czechoslovakia, threatened to invade China and Rumania, conspired twice with Egypt and Syria to attack Israel, assisted North Vietnam to conquer South Vietnam and a pro-Soviet government to seize Angola, and launched an ongoing imperialism in Africa." George F. Will, writing in *Newsweek*, says "rivers of blood and mountains of other evidence, constantly expanding, confirm the . . . view that they [the Soviet leaders] are a terrible and forbidding group of men" and that "the [Soviet] system presupposes and produces cold, cruel leaders."

And yet we persist in doing such idiotic and suicidal things as considering unilateral disarmament. Our political leaders do; and our church leaders and many of our intellectual leaders do, as well. In the name of peace they do the very things guaranteed to end it. While the Soviet Union arms to the teeth and builds their cities underground, our leaders mouth platitudes. Soviet intentions are unchanged and unhidden. We just have blind guides.

We can't do much about the latter two categories, but we can do a lot about the first. We can vote the rascals out, is what we can do, and we can put on them the pressure of "shape up or ship out" while they are in office.

I certainly do not wish this to be construed as implying the arms race is the only area of importance to us, or even necessarily the most important. Every area faced by our lawmakers and other leaders requires our scrutiny—their dealings with special interest groups, the economy, the balance of trade, and so on. In the republican form of government, unlike pure democracy, our representatives are not elected to reflect always the opinions of their constituency. But when they vote or act differently, they had better be persuasive—assuming, of course, that the electorate cares. There is some indication that unless money is involved, they do not. If that is true, Solzhenitsyn is right, and there

is no hope. But I believe most of you care.

This is an election year, and each election is becoming more critical than the last for our survival. It is for that reason that this issue of the JOURNAL carries a lot of political material. I am not trying to frighten you, only to inflame you. In our considerations we need to discount such obviously politically motivated nonsense as characterizes the entire thought patterns of the elected official who said the AMA is the greatest obstacle to health care in this country, and look at real issues and real candidates. More than looking at what a candidate will do for Medicine (or *says* he will do for Medicine)—though that is important, for it affects the care of our patients—we need to look at his record for integrity, intellectual honesty, and moral courage.

I should say at this point that there is nothing inherently dishonest, fraudulent, or dirty about politics. It is just made so by some of the people engaged in it. Unfortunately, most of the people who run for public office are “political animals,” defined as those who put running and winning ahead of principle. Their *modus operandi* is to promise anything in order to get elected. We do not pay enough attention to their record. And the fact of the matter is, we cannot.

Because it is impossible for each one of us to examine the record of every candidate, AMPAC (American Medicine's Political Action Committee) was formed, which though admittedly working in the service of Medicine, operates on the principle that it is in Medicine's best interest to elect men of integrity and courage. AMPAC and our local IMPACT (Independent Medicine's Political Action Committee—Tennessee) study the record of the candidates, and back the best.

You need IMPACT. Our country needs IMPACT. And so you need to support IMPACT. You need to become a *sustaining* member. You need to work for the candidate of your choice. You need to do it today. You need to do it for your patients, for your profession, and for your country.

You need to do it today because tomorrow may be too late.

J.B.T.

Gather Ye Rosebuds

Life isn't meant to be easy,
it's meant to be life.

James A. Michener, *The Source*

Reaction to the recent TV miniseries *Holocaust* was varied. Some felt it was too horrible to contemplate, while others—some who were there—thought it a cruel parody, and because the horror could never really be shown, it should not be shown at all. There were still others who thought it was a subject which should be filmed only in black and white, because that's the way it was lived, and there were complaints about the incredibly poor taste of the interspersed commercials.

In Miami some neo-Nazi, or some group thereof, broke the windows out of a synagogue, and another said holocaust was all propaganda—the Nazis didn't really kill 6 million Jews. It was only *one* million! A Nashville physician recalled the horror of trying to clear the emaciated dead bodies out of a concentration camp at the war's end, at the same time trying to bring back to life the living dead it still contained. Some young Jews commented that at last they knew what their parents and grandparents had gone through, even through a watered down version. The doctor observed that victims of those atrocities should not be required to recall any part of it, but the rest of us should never be allowed to forget it.

We should not be allowed to forget it because we need to recognize its origins. We need to recognize its origins because they are all around us today, as they have been throughout man's existence. In 1934 Joseph Goebbels said the Jews would be left alone as long as they did not “affront the German people with the claim to be treated as equals.” In Jesus' day the Samaritans affronted the Jews with that claim. The black have affronted the whites with it, too. Mexicans have affronted Texans, Chinese have affronted Californians, the poor affront the rich, capitalists affront communists and communists capitalists, Catholics affront Protestants and vice versa (we like to pretend it's only in Ireland), Baptists affront Episcopalians, and charismatics the Baptists, Moslems affront Christians (only in Lebanon, of course). And we would prefer to pretend the problem between blacks and whites is just in South Africa and Rhodesia.

The seeds of Nazism are all around us because they are within each of us whenever we look around in pride and make comparisons. Those seeds are liable to germinate when there is a threat to our welfare, our lifestyle, or our back pocket.

The Kentucky Derby, cockfights, the Olym-

pics, spelling bees, college entrance exams, and the World Series all prove there is no such thing as equality. So what were those who penned our constitution talking about? Or Lincoln, when he said we are "dedicated to the proposition that all men are created equal?"

The mad and the "feeble-minded" in Western civilization have customarily been locked up. They were horribly mistreated in 17th century Europe. They were gassed by the Nazis. But other cultures, "less civilized," have treated them with respect, as being blessed by the gods with the ability to see things hidden from the rest. Protein deficiency in infancy—or *in utero*—can produce mental defects. So can maternal alcoholism. In spite of all our sophistication, there is no way to test for potential, because performance in all tests is greatly influenced by culture and environment. And a classroom dunce may be a whiz on the basketball court. Mental deficiency, poor genes, or cultural deprivation? Equal to what? By what measure?

If individuals are not equal in any other way, they are equally precious to God, each one of them an individual for whom Christ died—Jew and SS officer, black man, white man and yellow, St. Peter, St. Paul, Hitler, Stalin, Mao, and you and I.

The seeds of Nazism should be recognized whenever there is repression of or contempt for people because of things over which they have no control. On the other hand, we need to be discriminating, and not be seduced in the name of liberty into giving license to just any old aberration of conduct which might come along. They are not the same. A thief can stop stealing, but a Jew cannot stop being a Jew and a black cannot become white, even assuming they might wish to. People have not always been able to see the difference. For the survival of society and a system of laws we must. It is incredible that in Skokie, Ill., where so many survivors of the holocaust live, *American Nazis* are allowed to march, under cover of the First Amendment. I doubt it's what the framers of our Bill of Rights had in mind.

To quote Michener—out of context, to be sure—"Life is not supposed to be easy," but "it is supposed to be life." It is supposed to be life for everyone, equally. We must never forget what bigotry did in Nazi Germany, among other places, and what it can do again. But even though we must hate the sin to the utmost, before we judge the sinners too harshly we need

to look inside and see if any seeds are germinating there.

Police shows and horror shows, all filled with gore and carnage, continue to be the most popular on television, proving our population not to be opposed to violence on the tube. But *Holocaust* came in third in the ratings each night, behind comedy shows, evidence, I guess, that at least some of us would rather laugh than think.

Gather ye rosebuds while ye may.

Old Time is still a flying:

And this same flower that smiles today

Tomorrow will be dying.

Robert Herrick

J.B.T.



MARY NORTHERN'S FEET

To the Editor:

I read with interest your article in the May TMA JOURNAL on the Mary Northern case. I have enclosed the text of the Tennessee Supreme Court's decision in the Northern case for your consideration. As you can see the case concerned the courts also.

My biggest problem with the entire matter, other than the press coverage, concerns the amount of time involved. Miss Northern's very competent attorney was successful in delaying resolution of the problem until the question became moot. This points up one of my greatest concerns with the legal system in that the issues are sidestepped until the result is watered down to the extent it becomes irrelevant and the problem has already been resolved, one way or the other, by the time the decision is rendered. I guess two maxims express my dissatisfaction best: "Do something, even if it is wrong," and "In the long run we'll all be dead."

Charles D. Morison, J.D.

Staff Attorney

Tennessee Medical Association

The court's decision was based on "partial incompetence." It held that although Mary Northern was competent in most areas, by her words she displayed incompetence to deal with the matter of her feet. She stated both that she wished to live and not die, and that she wished to keep her feet, choices which medical wisdom considered to be mutually exclusive. The court went to great lengths to uphold the right of a competent person over his own body, emphasizing that this was NOT a right-to-die case. In short, the court indicated that had Mary Northern said she wished to keep her feet whether or not the

choice resulted in her death, it would have ruled otherwise, even though such decision on her part would not have been what the community might think "sensible."—ED.

PHYSICIAN EXTENDERS

To the Editor:

I would like to express my opposition to the TMA stand on physician extenders. The TMA now advocates that physician extenders be approved only when working under the direct supervision of a physician. I believe the physician should have the right to supervise his paramedical personnel as he believes is most efficacious. Of course all such personnel must be well trained, and the physician must be fully familiar with their abilities and limitations before the scope of practice is defined.

There are many remote areas of our region in East Tennessee that are now being served by nurse practitioners. Without these community clinics these small populations would have no health care. Also the development of a paramedical program in our state should soon bring dividends in the number of lives that can be saved at the sites of sudden arrests.

I hope the TMA will support the position of physician choice in the area of physician extenders.

Peter G. Stimpson, M.D.
301 Cedar St.
Loudon, TN 37774

The JOURNAL would welcome rejoinders pro and con to Dr. Stimpson's letter. The "stand" to which he refers is found in Resolution No. 11-78, "Joint Practice Supervision," and Resolution No. 18-78, "Promulgation of Rules and Regulations by the Tennessee Board of Medical Examiners re: Joint Practice, T.C.A. 63-608." These appear in the June issue of the JOURNAL, pages 426 and 428. (J Tenn Med Assoc 71:426, 428, 1978)—ED.

new members

The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY

James H. Creel, Jr., M.D., Chattanooga

HAMBLÉN COUNTY MEDICAL SOCIETY

Harvey E. Sullivan, III, M.D., Morristown

KNOXVILLE ACADEMY OF MEDICINE

Glenn Edward Jeffries, Jr., M.D., Knoxville
Carl Klein, Jr., M.D., Knoxville

LINCOLN COUNTY MEDICAL SOCIETY

Sam M. Ashby, M.D., Fayetteville

McMINN COUNTY MEDICAL SOCIETY

Jung T. Park, M.D., Madisonville

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY

Mahir R. Awdeh, M.D., Memphis
Barry I. Eisenstein, M.D., Memphis
Thaddeus H. Ferrell, M.D., Memphis
Robert J. Kaplan, M.D., Memphis
Edward H. Mabry, Jr., M.D., Memphis
Amos Okrah, M.D., Memphis
William R. Porter, M.D., Memphis
William K. Prater, M.D., Memphis
Pallavi V. Rawtani, M.D., Memphis
Thomas E. Runyan, M.D., Memphis
Clifford W. Sims, M.D., Memphis

PUTNAM COUNTY MEDICAL SOCIETY

Donald W. Tansil, M.D., Cookeville

ROANE-ANDERSON COUNTY MEDICAL SOCIETY

M. Dean Loftis, M.D., Rockwood

SULLIVAN-JOHNSON COUNTY MEDICAL SOCIETY

David Anthony Cowden, M.D., Kingsport
Terrell Carroll Estes, M.D., Bristol
Joel Queenor Peavyhouse, M.D., Kingsport
Lorenzo Dow Strader, M.D., Bristol

WASHINGTON-CARTER-UNICOI COUNTY MEDICAL ASSOCIATION

Robert C. Allen, M.D., Johnson City
Mohammad S. K. Arkee, M.D., Johnson City
Lester R. Bryant, M.D., Johnson City
Avtar Singh Dhaliwal, M.D., Johnson City
Timothy Ewing, M.D., Johnson City
Robert G. Hutchins, M.D., Johnson City
Jayant B. Mehta, M.D., Johnson City
Jack E. Mobley, M.D., Johnson City
F. Michael Shepard, M.D., Johnson City

personal news

John W. Adams, M.D., Chattanooga, former chief pathologist and director of laboratories at Erlanger Hospital, has been appointed the Hamilton County medical examiner.

Robert G. Allen, M.D., Memphis, chief of the medical staff at Le Bonheur Children's Hospital, has been named president-elect of the American Pediatric Surgical Association.

Rex A. Amonette, M.D., Memphis, was elected president of the Memphis-Shelby County chapter of the American Cancer Society.

Paul H. Barnett, M.D., Nashville, has been installed as president of the Nashville chapter of the Tennessee Volunteers for Life Inc. The organization, an affiliate of the National Right-To-Life Committee, is aimed at passage of a human life amendment to the U.S. Constitution.

Ernest L. Coburn, M.D., Nashville, has been certified as a Diplomate of the American Board of Radiology.

Jerry J. Crook, M.D., Morristown, has been elected chief of staff at Morristown-Hamblen Hospital.

Ben D. Hall, M.D., Johnson City, was installed as president of the American Society of Internal Medicine during its annual meeting May 4-7.

James M. High, M.D., Nashville, has been named president of the Tennessee affiliate of the American Heart Association. *James J. Acker, M.D.*, Knoxville, was named president-elect of the chapter.

Harold W. Jordan, M.D., Nashville, state commissioner of mental health, has announced he will leave government service in January to oversee the psychiatric programs at Meharry Medical College and Hubbard Hospital.

J. T. Layne, M.D., Copperhill, has been elected a Fellow of the American Occupational Medical Association.

Robert Sanders, M.D., Murfreesboro, director of the Rutherford County Health Department, was given the Ross Award at a meeting of the Southern Branch of the American Public Health Association, May 16. The Ross Award recognizes "distinguished service in maternal and child health care" and was given to Dr. Sanders because of his efforts in obtaining passage of state legislation requiring restraints for children in automobiles (Tennessee Child Passenger Protection Act of 1977).

C. Gerald Sundahl, M.D., Knoxville, was elected president of the East Tennessee Chapter of the American Heart Association at its 29th annual meeting at the University Center, May 16.

society. To this end, the Nashville Academy of Medicine, as a representative body of doctors of medicine in Nashville, urges all physicians, individually and collectively, in the Nashville-Davidson County area to endorse and participate in the following plan for health care cost containment: (1) That all physicians maintain open lines of communication with their patients in an effort to resolve misunderstandings and differences concerning health care costs; (2) That all physicians (practitioners, medical staffs, educators, and those in training) become more knowledgeable in all aspects of patient related medical expenses, including office and hospital charges of both a service and professional nature; (3) That all physicians be cost conscious and exercise discretion consistent with good medical care in determining the medical necessity for hospitalization and for specific procedures, tests, and ancillary medical services; (4) That all physicians carefully review their professional charges, operating overhead, and office management practices with the objective of providing quality medical care at the most reasonable patient cost; and (5) That physicians serving as members of hospital utilization review committees, the Peer Review Committee of the NAM, and on other cost review bodies, be aggressive in encouraging their colleagues to keep their charges within reasonable limits.

In an effort to achieve these objectives, the Academy will establish a Task Force on Health Care Cost Containment with the charge of overseeing the implementation of this program. The NAM encourages all other providers and suppliers in the health care field to adopt a similar cost containment effort.

programs and news of medical societies

Bradley County Medical Society

Dr. William W. Johnson, president of the Bradley County Medical Society, appointed a liaison committee to work with the Cleveland Associated Industries' Health Care Committee. The purpose of the medical society's committee is to explore ways of providing quality medical care at optimum, reasonable, patient cost through appropriateness of fees and efficient office management, thus favorably moderating the rate of escalation of health care cost. The chairman of the committee is Dr. Hays Mitchell; members of the committee are Drs. Gilbert A. Varnell, John M. Appling, Robert H. Cofer, Frank K. Jones, Jr., James Cecil Lowe, and Chalmer Chastain, Jr.

Nashville Academy of Medicine

The cost of health care must be confronted reasonably and responsibly by all segments of our

medical news in tennessee

Jack Drury, R.I.P.

John Benjamin Drury, executive secretary of the Nashville Academy of Medicine from 1954 until his retirement in 1973, died May 8 in Nashville of a myocardial infarct. The results of his labors and his devotion to the Academy are still present in many of its current policies and programs. Because the Academy offices were in the TMA building, he also made his presence felt statewide in his quiet, unobtrusive manner, and all of us have benefited from his wisdom.

Jack's interests were wide, and he was much involved in other community activities, including the Exchange Club of Nashville, Bill Wilkerson Speech and Hearing Center, Nashville Eye Bank, Red Cross Blood Center, and Westminster Presbyterian Church. Those of us who were privileged to know him and work with him mourn his passing.

J.B.T.

From the AMA's Office in Washington, D.C.

HEW Fights Voluntary Cost Cap Effort

The Health, Education and Welfare Department has asked the Justice Department to delay granting the nation's hospitals an exemption under the anti-trust laws in order to carry out their voluntary cost containment effort.

John Alexander McMahon, AHA president, said that "it seems passing strange that HEW would undermine and even try to undercut our Voluntary Effort" by taking this position before Justice.

HEW told Justice in a letter there may be a serious lack of public accountability and public participation in the Voluntary Effort conducted by the AHA, the American Medical Association and the Federation of American Hospitals.

HEW general counsel wrote Justice that the Voluntary Effort might discriminate against smaller community hospitals and health maintenance organizations and also might work to hold down wages of hospital workers.

HEW has been hostile to the Voluntary Effort from the outset, contending that only mandatory federal controls as embodied in the administration hospital cost containment program are the answer to inflation in hospital costs.

Meanwhile, the war of words on the administration's controversial hospital revenue control plan heightened when HEW Secretary Joseph Califano charged that opponents of the plan are "crowding the halls of Congress" and "lobbying for runaway inflation."

"Even Lloyds of London backed by the United States mint could not afford to insure the existing profligate, inflationary health care industry," he said in a speech.

The vote on hospital controls in the House Commerce Committee is considered the key to the fate of the administration's plan. President Carter has dispatched a letter to every member of the committee urging them to back the administration's plan.

Stuart Eizenstat, White House domestic affairs chief, said the issue before the committee was "whether we have as a nation the capability of facing up to the inflation problem."

Surgery "Second Opinion" Pushed

HEW is preparing to launch a program to encourage second opinions for surgery for Medicare/Medicaid patients. Patient pamphlets, physician enrollment, and radio-television ads ("second opinion—it's good for you") are projected.

"List developers" will set up lists of physicians

willing to participate in a second opinion (SO) program, on patient request. "List holders" will operate telephone referral centers to which patients may apply for the names of participating physicians.

Developers will query physicians as to their willingness to participate, inform them of any "ground rules," and develop the lists, with appropriate information such as willingness to accept Medicaid patients.

The Health Care Financing Administration of the HEW Department believes professional standards review organizations (PSROs) are the logical units to handle the "list" functions. However, carriers and medical societies also are eligible.

Public campaigns will begin soon and will consist of brief TV spot announcements and longer radio "dramas" on SO which will be distributed to stations. Five million leaflets will be distributed with Social Security checks in selected areas. A national "hot-line" (800 number) will be established, probably with the PSRO clearinghouse in Rockville, Md.

Once the program is operational, callers will be given the names of two or three physicians who are willing to accept requests for second opinion consultation. Wherever feasible, the referral center will try to give the names of physicians with some special competence in the type of condition for which surgery has been recommended, HEW said.

For Medicare patients, the program will pay for the second opinion as for other consultations, at 80% of the "reasonable charge," while Medicaid participation and payment, thus far, is at the option of the individual state. This may pose a tough problem in some states.

As presently planned, use of the second opinion will be at the patient's option, and the second opinion will not control payment for services.

The SO program is based on the assumption that second opinions will forestall unnecessary surgery.

AMA Attacks Federal "Boss" Attempt

Attacking "federal bossism" in health planning, an AMA official has said that planning must be flexible and "cannot be stereotyped from federal blueprints."

Frank J. Jirka, Jr., M.D., vice chairman of the AMA Board of Trustees, told a National Journal Conference on Health Policy that the best way to uphold availability and quality is to have planning decisions made at the local level. Practicing physicians should be well represented on planning bodies, Dr. Jirka said.

The planning guidelines recently put into effect are still mandatory . . . "in a way that runs counter to congressional intent" he declared and "complaints about the guidelines keep pouring into HEW headquarters . . . and now exceed 70,000." The standards "ignore many of the realities of medical care . . . and could cause substantial disruption in the accessibility and provision of health services," according to Dr. Jirka.

Although the HEW secretary has given assurances

against the closing of existent hospitals, "they are not borne out in the body of the guidelines," Dr. Jirka noted. "Even the expansion of physicians' offices and their equipment would be affected if Congress decides to include them in the planning act's certificate-of-need provisions," he said.

"There is as yet little evidence to support the notion that certificate of need results in significant cost savings," said Dr. Jirka. "And if it doesn't, why badger doctors' offices with it?"

Computer Status Examined

The AMA has cautioned against precipitous or unilateral government action in the field of computer technology for medical purposes. Such intrusion "might retard the momentum" developed with computers, the AMA told a House science subcommittee. H. Phillip Hampton, M.D., speaking for the Association, said "the primary thrust in the growing and changing field of computer technology has been and should remain in the private sector."

However, Dr. Hampton said, the federal government has an important role in assisting the development of technology and "should remain a stabilizing influence . . . such a stable influence can be best achieved by continuing to fund substantial research and development projects, by insuring only necessary requirements on the individuals and organizations involved in medical and other health services delivery at the local level."

Computers should improve methodologies of prevention and treatment of diseases by increasing the level of preventive, diagnostic and therapeutic medical skills and make the skills accessible by providing them at a cost within the financial reach of the patient, Dr. Hampton said.

"Since many physicians are reaching the point of overload in trying to maintain and improve patient care while complying with increased administrative and governmental demands, use of computer technology has become more attractive," he noted.

Computers have "an enormous potential in improving patient care; in creation, storage, maintenance and retrieval of medical records; in improving preventative, diagnostic and therapeutic skills; in reducing the rate of increasing costs; in improving facility and personnel utilization; and in improving office management," the AMA spokesman testified.

CEA Comments on NHI

The chairman of the Council on Economic Advisors told the administration that it is "unrealistic at this time to propose a national health insurance (NHI) package which mandates universal and comprehensive low-dollar coverage."

In a paper on NHI prepared for presidential review, Charles Schultze said comprehensive coverage would "stretch thin" the health sector resources and thus exacerbate inflation. A sweeping NHI program would tend to "override completely" consumer latitude in choosing between health care and other goods

and services such as housing and education, he said.

The paper said the CEA believes the administration's NHI plan should include better and "more rational" health assistance for the poor and catastrophic coverage for lower and middle-class families. Those objectives should be financed out of general revenues, CEA said, but without public reinsurance of private catastrophic programs except, perhaps, for health maintenance organizations. Otherwise, any mandated increase in private coverage—"presumably financed by premiums"—should be considered in terms of a "minimal target package stripped of preventive care," the paper added.

The CEA paper also insists on stronger cost controls through regulatory legislation, but apart from any expensive health care package. "If the politics of the situation make it possible to combine a comprehensive benefit package with strong cost control, they should also make it possible to get the same cost control without the comprehensive package . . . insurance companies and individuals, who are the beneficiaries of a larger package, are not the ones who object to cost control," the paper concluded.

Enactment of an NHI program with first rate mental health benefits may be the best, single step to help mentally ill Americans, according to the report of the President's Commission on Mental Health.

Declaring that one out of every seven suffers from some mental affliction, the commission reported that too many of these are untreated. Almost half of the population could be classed as mentally ill or as experiencing severe emotional problems, the report said.

The commission, headed by Thomas Bryant, M.D., was formed more than a year ago as a response to the keen interest in mental health by Mrs. Rosalyn Carter and special White House Health Assistant, Peter Bourne, M.D., a psychiatrist.

"We firmly believe that a national health insurance program which includes appropriate coverage for mental health care offers the most effective means of providing adequate financing for . . . all Americans," the 20-member panel reported.

Catastrophic Coverage Bill Introduced

A "middle-of-the-road" NHI bill with powerful Senate backing has been introduced into the Congress. Emphasis in the bill is placed on catastrophic coverage.

The measure is supported by Chairman Russell Long (D-La.) of the Senate Finance Committee, Health Subcommittee Chairman Herman Talmadge (D-Ga.), and Sens. Abraham Ribicoff (D-Conn.) and Robert Dole (D-Kans.).

The bill is substantially the same as the one introduced in the 94th Congress by Long.

"Our purpose . . . is to have before the Congress and the American people a legitimate national health insurance approach developed by the Congress," Long told the Senate. "This is not the administration's proposal, nor that of any special interest group. It is our legislation."

AMA Reacts to Kennedy Health Proposals

In an unprecedented joint effort, Sen. Edward Kennedy (D-Mass.) and the AMA will sponsor a two and a half day conference on "Positive Health Strategies" in Washington, D.C., July 25-27.

The sponsors have announced plans to bring together interested groups as cosponsors and participants to focus public attention on the potential benefits of strategies of *disease prevention* and to project possible programs for improvement in the 1980s.

The preliminary program lists keynote speakers as Senator Kennedy; Tom E. Nesbitt, M.D., President-Elect of the AMA; George Meany, president, AFL-CIO; and Lester Breslow, M.D., dean, School of Public Health, University of California, Los Angeles.

In an address before the AMA's Leadership Conference in January of this year, Senator Kennedy issued an invitation to the AMA to join him in sponsoring a national disease prevention conference designed to focus the attention of the nation on the great potential of preventive measures to reduce the toll of disease in our population.

Dr. Nesbitt, in accepting for the AMA, stated, "we are happy to participate in an arena that encourages a wide spectrum of ideas and programs on health. Organized medicine and physicians have long been concerned with, and active in, the areas of disease prevention and positive health programs. We are certain that this interaction will be profitable to all Americans."

Meanwhile, Senator Kennedy has launched a major new health initiative with introduction of legislation to instruct Americans on good health practices and disease prevention.

National health insurance can improve access to care, but it can't "make us a healthier and more long-lived people unless it is combined with a comprehensive strategy for reducing death and disability through prevention," Kennedy told the Senate.

The bill calls for spending of \$150 million the first year climbing to \$300 million. Existing health promotional activities would be expanded at the federal, state and local level and new ones installed.

Lowell Steen, M.D., a member of the AMA Board of Trustees, said the AMA is "basically supportive" of the measure, formally called the National Disease Prevention and Health Promotion Act of 1978. Dr. Steen told a national television audience that some of the programs are "things that the AMA has been advocating for many years." However, we have "some reservations" about certain provisions, Dr. Steen said.

Senator Kennedy, appearing on the same program, said "I think we've got a good partnership," noting the jointly sponsored conference with the AMA in late July.

Feds to Teach Docs About Inflated Health Costs

The White House Council on Wage and Price Stability plans an educational program for physicians on inflation in health care costs. The council also will seek the assistance of the AMA in developing an effective monitoring or reporting mechanism to measure the rate of physicians' fees with respect to an agreed upon "measuring device or indicator."

The objective is to develop a long-term mechanism to assist in cutting the rate of increase in the future.

The plans were discussed with AMA officials at a recent Washington, D.C., meeting. Among those attending were John Budd, M.D., AMA President; Frank Jirka, M.D., Vice Chairman of the AMA Board of Trustees; and Bernard Harrison, AMA Group Vice President.

New Drug Bill Debated: Cookbook Medicine

The sweeping drug bill before Congress signals a shift in philosophy "where government takes it upon itself to 'protect' patients from their physicians," the AMA has told the Senate human resources subcommittee on health.

The current philosophy is that of a "joint effort of government and the medical profession to protect unsuspecting patients from unethical manufacturers and vendors," testified Lowell H. Steen, M.D., a member of the AMA Board of Trustees.

The subcommittee, headed by Sen. Edward Kennedy, held four days of hearings in a debate-type format on various provisions of the administration's ambitious proposal to revamp the drug laws.

Dr. Steen said the provisions aimed at "protecting" patients "would unjustifiably interfere with the practice of medicine by placing the Food and Drug Administration between the physician and the patient through the imposition of national standards and criteria for use of drugs."

The bill gives the FDA power in determining safety of a drug, such factors as abuse potential, whether the drug is being used for nonapproved uses, whether FDA believes there is a more appropriate drug or treatment, and whether the drug would have an adverse effect upon public health, the AMA witness noted.

Dr. Steen said "risk of side effects, dependency and other issues of concern are weighed by the physician, using his clinical judgment and knowledge of the patient. It would not be in the interest of providing the best care for patients to reduce the practice of medicine to that of merely following a government issued cookbook or instruction manual on medical practice and treatment modes."

"In the real world of actual practice, physician use of drugs is best controlled, not by the FDA, but

by appropriate peer review, continuing medical education and the physician's training and experience, together with his desire to do what is best for his or her patient," said Dr. Steen.

HMO Support Draws Fire

The administration's \$500 million Health Maintenance Organization (HMO) bill ran into opposition from key senators alarmed over reports of widespread fraud and abuse.

"Wouldn't it be best to put brakes on the whole HMO program?" asked Sen. Herman Talmadge (D-Ga.), chairman of the Senate finance subcommittee on health. Sen. Sam Nunn (D-Ga.), vice chairman of the Senate permanent subcommittee on investigations, agreed. Sen. Carl Curtis (R-Neb.) said that if HMOs are "any good, they will grow on their own" without the need for any federal subsidy.

Nunn told the finance subcommittee that "unless remedial action is taken, the federal government, through its program of financing the development of HMOs, faces the prospect of encountering nationwide the same kinds of scandal and abuse that have plagued the California Medicaid program." There is evidence that organized crime is moving into the HMO field, the Georgia senator warned.

The investigations subcommittee recently released a report charging large scale abuse and fraud in the California HMO program.

announcements

CALENDAR OF MEETINGS NATIONAL 1978

- July 30-Aug. 3 National Medical Association, Hilton Hotel, Washington, D.C.
- Aug. 3-6 International Doctors in Alcoholics Anonymous, Sheraton-Southfield Hotel, Southfield, Michigan
- Aug. 6-8 American Association of Diabetes Educators, Chase-Park Plaza, St. Louis
- Aug. 10-12 Black Hills Summer Seminar, Holiday Inn, Spearfish, South Dakota
- Aug. 13-17 American Society for Pharmacology and Experimental Therapeutics, University of Houston, Houston
- Aug. 27-31 International Society for Experimental Hematology, Chicago
- Sept. 10-14 American Academy of Ophthalmology and Otolaryngology, Convention Center, Las Vegas
- Sept. 10-14 American Society of Ophthalmologic and Otolaryngologic Allergy, Dunes Hotel, Las Vegas

- Sept. 10-15 Flying Physicians Association, Astro Village Hotel, Houston
- Sept. 11-13 National Conference on the Care of the Child With Cancer, sponsored by American Cancer Society, Sheraton Hotel, Boston
- Sept. 13-16 American Thyroid Association, Benson, Portland, Oregon
- Sept. 14-16 American Association for the Surgery of Trauma, Hyatt Lake Tahoe, Lake Tahoe, Nevada
- Sept. 14-16 South Central Association for Clinical Microbiology, Stouffer's Dayton Plaza Hotel, Dayton, Ohio
- Sept. 17-21 World Federation of Nuclear Medicine and Biology, Hilton Hotel, Washington, D.C.
- Sept. 19-21 American College of Emergency Physicians, Hyatt Regency & Sheraton, Houston
- Sept. 20-22 American Academy of Occupational Medicine, Williamsburg Inn, Williamsburg, Virginia
- Sept. 21-14 American Society of Bariatric Physicians, Fairmont Hotel, New Orleans
- Sept. 22-24 American Neurological Association, Shoreham-Americana Hotel, Washington, D.C.
- Sept. 23-27 American Fracture Association, Brown Palace Hotel, Denver
- Sept. 24-30 American College of Gastroenterology, Marriott Hotel, Denver
- Sept. 25-28 American Academy of Family Physicians, Fairmont Hotel, San Francisco
- Sept. 29-30 American Society of Internal Medicine, Orlando, Florida

STATE

- Sept. 11-12 Tennessee Valley Medical Assembly, Chattanooga Choo Choo Convention and Concert Hall

SUPPORT YOUR ADVERTISERS

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The continuing medical education accreditation program of the TMA has full approval by the Liaison Committee on Continuing Medical Education. An accredited institution or organization may designate for Category 1 credit toward the AMA Physician's Recognition Award those CME activities that meet appropriate guidelines. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Ave., Nashville, TN 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

IN TENNESSEE

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman, can plan an individualized program of one to four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, ward rounds, learning individual procedures, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

Participating Departments and Divisions

Allergy & Immunology	Samuel Marney, M.D.
Anesthesiology	Bradley E. Smith, M.D.
Cardiology	Gottlieb C. Friesinger, III, M.D.
Chest Diseases	James D. Snell, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Dermatology	Lloyd King, M.D.
Diabetes	Oscar B. Crofford, M.D.
Endocrinology	David Rabin, M.D.
	David N. Orth, M.D.
Gastroenterology	Steven Schenker, M.D.
General Internal Medicine	W. Anderson Spickard, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.
Medicine	Grant W. Liddle, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Oncology	Robert Oldham, M.D.
Orthopedics	Paul W. Griffin, M.D.
Pathology	William H. Hartmann, M.D.
Pediatrics	David T. Karzon, M.D.

Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Everette James, Jr., Sc.M., J.D., M.D.
Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sergent, M.D.
Surgery	
Cancer Chemotherapy	Vernon H. Reynolds, M.D.
General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neill, M.D.
Plastic	John B. Lynch, M.D.
Renal Transplantation	Robert E. Richie, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.

Eligibility: All licensed physicians are eligible.

Administrative Fee: \$200.00 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1) and American Academy of Family Physician's Continuing Education accreditation.

Application: For further information and application, contact: Paul E. Slaton, M.D., Director, Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

Continuing Education Schedule 1978

Sept. 15-16	9th Annual Pediatric Symposium—Recent Advances in Therapy and Prevention of Infectious Diseases
Sept. 21-22	Postgraduate Course in Allergy
Sept. 27-30	Symposium on Diagnostic Imaging
Sept. 29-30	Parenteral Alimentation

For information contact: Vanderbilt Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

MEHARRY MEDICAL COLLEGE SCHOOL OF MEDICINE

Extended Continuing Education Program

Arrangements have been made with the following services and departments in the medical school to allow practicing physicians to participate in that service's activities for a period of one to four weeks. This program provides an opportunity for physicians to study in depth for a specified period. The schedule of activities is individualized in response to the physician's request by the participating department. The experience includes conferences, ward rounds, audiovisual materials and contact with patients, residents and faculty.

Participating Departments

Anesthesiology	Ramon S. Harris, M.D.
Family Practice	John Arradondo, M.D.
Internal Medicine	
Cardiology	John Thomas, M.D.
	Kermit R. Brown, M.D.
	Qamar A. Kahn, M.D.

Chest Disease	Joseph M. Stinson, M.D. Paul A. Talley, M.D. Edward A. Mays, M.D.
Dermatology	Thomas W. Johnson, M.D. David Horowitz, M.D.
Gastroenterology	Ludwald O. P. Perry, M.D. Buntwal M. Somayaji, M.D.
General Medicine	Edward A. Mays, M.D.
Hematology/Oncology	Robert S. Rhodes, M.D. Robert S. Hardy, M.D.
Neurology	Calvin L. Calhoun, Sr., M.D. Gregory Samaras, M.D.
Obstetrics & Gynecology	Henry W. Foster, M.D.
Gynecological Endocrinology	Elwyn M. Grimes, M.D.
Ophthalmology	Axel C. Hansen, M.D.
Orthopedics	Wallace T. Dooley, M.D.
Pathology	Louis D. Green, M.D. John C. Ashhurst, M.D.
Pediatrics	E. Perry Crump, M.D.
Surgery	
General	Louis J. Bernard, M.D.
Neurological	Charles E. Brown, M.D.
Thoracic and Cardiovascular	David B. Todd, M.D. Ira D. Thompson, M.D.
Urology	Marcelle R. Hamberg, M.D.

Fee: \$100 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1), American Academy of Family Physicians Continuing Education Accreditation and Continuing Education Units by Meharry Medical College.

Application: For further information contact Frank A. Perry, M.D., Director, Continuing Education, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

Continuing Education Schedule

October Cleve Ewell Hematology Seminar (6 hours)

For information contact Frank A. Perry, M.D., Director of CME, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

UNIVERSITY OF TENNESSEE CENTER FOR THE HEALTH SCIENCES

Continuing Education Schedule 1978-79

This comprehensive listing of UTCHS courses includes programs of the Chattanooga, Knoxville, and Memphis units. The codes (C), (K), and (M) indicate the continuing education unit handling the arrangements for a particular program.

Aug. 9	(K)	Family Practice Conference
Sept. 13-15	(M)	Cardiac Auscultations
Sept. 21-22	(M)	10th Memphis Conference on Mother, Fetus, and Newborn
Sept. 22	(C)	Dermatology for the Family Physician
Sept. 27- Oct. 11	(M)	Current Issues in Cardiology & Pulmonary Disease; EKG Interpretation (Mediterranean Cruise visiting France, Egypt, Israel and Greece)
Sept. 28-29	(C)	Current Methods in OB/GYN

Sept. 28-29	(M)	Medical and Surgical Emergencies (Jackson)
Oct. 5-7	(C)	Diagnostic Radiology for the Primary Care Physician
Oct. 12-14	(K)	Office Ultrasound
Oct. 22-24	(K)	Cancer Concepts 1978 (Gatlinburg)
Oct. 26-27	(C)	Emergency Medicine
Oct. 26-28	(M)	Medical Alumni Day
Oct. 27-29	(K)	Tennessee Radiological Society Meeting
Nov. 2-3	(M)	Clinical Evaluation & Management of Chronic Pain
Nov. 15	(C)	Nosocomial Infections
Nov. 17	(K)	7th Annual Internal Medicine Symposium
Nov. 30- Dec. 1	(C)	Nephrology-Urology Update
Dec. 8-9	(M)	Otolaryngology for the Primary Care Physician
Dec. 26- Jan. 1	(C)	Hawaii (Departing from Chattanooga)

1979

Jan. 24-26	(M)	Audiometric Orientation — first session
Jan. 25-26	(C)	Allergies
Feb. 7-9	(M)	Gynecologic Urology
Feb. 12-13	(M)	Practical Office Dermatology
Feb. 23-24	(C)	Gut Problems: A Clinical Approach—St. Petersburg, Fla. (Tierra Verde)
Feb. 24- March 2	(K)	Caribbean Cruise (Departure from New Orleans with stop in Havana)
March 5-8	(C)	Diagnostic Radiology for the Primary Care Physician (Sahara Tahoe, Stateline, Nevada)
March 18-24	(M)	Review Course for Family Physicians
March 29-30	(C)	Pediatrics
April 6	(C)	Advances in the Diagnosis and Management of Hypertension
April 9-17	(C)	Infectious Disease for the Clinician—Caribbean Cruise—Departure from Santa Domingo
April 16	(M)	Modern Approach to Hypertension
April 26-27	(C)	Orthopaedics
April 26-27	(M)	Lee Buring Memorial Conference
May 7-9	(M)	4th Annual Symposium on Reproductive Medicine
May 10-11	(C)	Rheumatology (Gatlinburg)
May 17-19	(M)	Practical Otolaryngology for the Primary Care Physician
May 21-25	(M)	3rd Annual Internal Medicine Review Course
June 6-8	(M)	Audiometric Orientation — second session
June 6-9	(M)	Basic Electrocardiography
June 7-10	(C)	Family Practice Review Course

- June 9 (M) Audiometric Orientation — refresher course
- June 11-14 (M) Fundamental Principles of Rhinoplasty
- Aug. 23-25 (M) ENT Postgraduate Review
- For further information about any of these courses, please contact the appropriate individuals below:

- (C) Mr. LeRoy J. Pickles, Director of Continuing Medical Education, UTCHS/Clinical Education Center, 921 E. Third St., Chattanooga, TN 37403, Tel. (615) 756-3370.
- (K) Dr. Harvey L. Goodman, Director of CME, UTCHS/Knoxville, Box 116, 1924 Alcoa Hwy., Knoxville, TN 37920, Tel. (615) 971-3345.
- (M) Mr. Wallace Mayton, Director of Conferences, Div. of Continuing Education, UTCHS, 800 Madison Ave., Memphis, TN 38163, Tel. (901) 528-5547.

For general information about the total program, contact Dennis K. Wentz, M.D., Director of Continuing Education, Asst. Vice-Chancellor for Academic Affairs, UTCHS, 62 S. Dunlap St., Memphis, TN 38163, Tel. (901) 528-5605.

EAST TENNESSEE STATE UNIVERSITY

Continuing Education Schedule 1978

- Aug. 18 Medical Economics
- Aug. 21 Pharmacists and Hyperactivity (co-sponsored by CIBA)
- August Radiology (cosponsored by Franklin Society)
- Sept. 7-8 Cardiology Today
- Sept. 21-22 Southern Appalachia Regional Health (cosponsored by ARCHA)
- Oct. 5-6 Geriatrics—A Team Approach (co-sponsored by Mountain Home VA)
- Oct. 20 Child Abuse
- October Tennessee State Health Conference (co-sponsored by UT-Memphis, Vanderbilt, Meharry)
- Nov. 6-7 Child Development Clinic
- Nov. 16-17 Adolescent Medicine
- Dec. 4-6 Occupational Medicine (cosponsored by Tennessee Eastman)
- December Marriage and the Physician

For information contact Dr. Charles F. Johnson, Assistant Dean, East Tennessee State University, College of Medicine, Dept. of Continuing Medical Education, Johnson City, TN 37601, Tel. (615) 929-5364.

IN SURROUNDING STATES

UNIVERSITY OF KENTUCKY

Mini-Residencies for Medical and Surgical Practitioners in Office Management Of Emotional Problems

The objective of this course is to give physicians

an ideal emotional counseling technique that fits busy office practices. The technique uses a concept of emotions that is consistent with human anatomy and psycho-physiology. Yet, the technique requires no more physician time or patient cost than routine evaluations of new patients. Finally, the technique is readily understandable and easy for practitioners to apply.

One, two and three week courses. Minimum of 40 hours per week. *Tuition Fee:* \$350 per week for the 1st & 2nd week of training; \$500 for 3rd week of supervised practice with patients in the Intensive RBT Treatment Program.

For further information contact: Maxie C. Maultsby, Jr., M.D., Office of Continuing Medical Education, Dept. of RBT, University of Kentucky, Lexington, KY 40506.

Continuing Education Schedule 1978

- Oct. 27-28 Fluid and Electrolyte Balance Made Simple—Hyatt Regency Lexington, Lexington, Ky. *Credit:* 10 hours AMA Category 1. *Fee:* \$75.
- Aug. 13-18 Ninth Family Medicine Review (Sessions II and III)—Hyatt Regency Lexington, Lexington, KY. *Credit:* 50 hours AMA Category 1 and AAFP. *Fee:* \$295.

For information contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, KY 40506.

MEDICAL COLLEGE OF GEORGIA

- July 31- Aug. 2 Pediatrics: Common Office Problems—Holiday Inn, Jekyll Island, Ga. *Credit:* 13-1/4 hours AMA Category 1; 13-1/2 AAFP Prescribed. *Fee:* \$140 for entire program or \$50 per day.

For information contact: Division of Continuing Education, Medical College of Georgia, Augusta, GA 30901.

DUKE UNIVERSITY MEDICAL CENTER

- July 31- Aug. 5 Current Concepts in Diagnostic Radiology including Ultrasound, CT Scanning and Nuclear Medicine—Atlantic Beach, N.C. *Credit:* 30 hours AMA Category 1. *Fee:* \$200.

For information contact Robert McLelland, M.D., Radiology-Box 3808, Duke University Medical Center, Durham, NC 27710, Tel. (919) 684-4397.

BOWMAN GRAY SCHOOL OF MEDICINE

Courses in Ultrasound

Three eight-week courses in sonic medicine will be offered at Bowman Gray School of Medicine on the following dates: Sept. 18-Nov. 10, 1978; Jan. 8-March 2, 1979; and April 2-May 25, 1979. *Credit:* 30 hours per week in AMA Category 1.

Three additional two-day real time courses are offered for obstetricians on Sept. 14-15, 1978; Nov. 16-17, 1978; and March 8-9, 1979. *Credit:* 10 hours per day in AMA Category 1.

For information contact James F. Martin, M.D., Director, Center for Medical Ultrasound, Bowman Gray School of Medicine, Winston-Salem NC 27103.

OF SPECIAL INTEREST

AMERICAN CANCER SOCIETY— NATIONAL CANCER INSTITUTE

Sept. 11-13 National Conference on the Care of the Child with Cancer—Sheraton-Boston Hotel, Boston. *Credit:* AMA and AAFP. *Fee:* None.

For information contact Sidney L. Arje, M.D., ACS-NCI, 777 Third Ave., New York, NY 10017, Tel. (212) 371-2900.

AMERICAN MEDICAL ASSOCIATION

Medical Staff Leadership Seminars—1978

Sept. 29-30 Fairmont Hotel, New Orleans

Nov. 3-4 Eden Roc Hotel, Miami Beach

Credit: 14 hours AMA Category 1.

Fee: AMA member of medical society staff, \$150; nonmember, \$200.

For information contact AMA Department of Hospitals and Health Facilities, 535 N. Dearborn St., Chicago, IL 60610, Tel. (312) 751-6653.

THE MENNINGER FOUNDATION

Workshops for Physicians and their Families

Aug. 13-18 Physicians and their Families: An Experience in Communication—YMCA of the Rockies, Estes Park, Colo. *Credit:* 25 hours AMA Category 1 and AAFP Prescribed. *Fee:* \$325 per family (parents and unmarried children under 21 years of age).

For information contact Erwin T. Janssen, M.D., Director of Division of Continuing Education, The Menninger Foundation, Box 829, Topeka, KS 66601, Tel. (913) 234-9566.

ESTES PARK INSTITUTE

The Estes Park Institute, a non-profit educational organization, will sponsor Hospital Medical Staff Conferences and Hospital Trustee Forums at the dates and locations below. *Credit:* 30 hours AMA Category 1 (each location). *Fee:* \$190.

Oct. 1-5 Pocono Manor, Pennsylvania

Nov. 12-16 Pacific Grove, California

Dec. 3-7 Clearwater Beach, Florida

For information contact Estes Park Institute, P.O. Box 400, Englewood, CO 80151, Tel. (303) 761-7709.

BETH ISRAEL HOSPITAL

Aug. 13-18 Aspen Mushroom Conference (Identification of edible, poisonous, and hallucinogenic mushrooms; treatment of mushroom poisoning; microscopy)—Wildwood Inn, Snowmass-at-Aspen, Colo. *Credit:* AMA Category 1.

For information contact Beth Israel Hospital, 1601 Lowell Blvd., Denver, CO 80204, Tel. (303) 825-2190, ext. 359.

BOWMAN GRAY SCHOOL OF MEDICINE

Seminar in Ultrasound

Aug. 21-23 Advanced Seminar on Ultrasound of the Abdomen and Obstetrics (co-sponsored by Orlando Regional Medical Center)—Dutch Inn, Lake Buena Vista, Fla. *Fee:* physicians \$200; residents and sonographers \$125.

For information contact J. F. Martin, Director, Center for Medical Ultrasound, Bowman Gray School of Medicine, Winston-Salem, NC 27103.

UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE

Sept. 17-22 Annual Otolaryngologic Assembly of 1978—Eye and Ear Infirmary of the University of Illinois Hospital, Chicago. Presented by the Abraham Lincoln School of Medicine, University of Illinois at the Medical Center.

For information contact Department of Otolaryngology, Illinois Eye and Ear Infirmary, 1855 W. Taylor, Chicago, IL 60612.

UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER—DALLAS

Sept. 29-30 Basis for Making Therapeutic Decisions: Update of Common Problems—Zale Lecture Hall, Dallas. *Credit:* 14 hours AMA Category 1; AAFP pending. *Fee:* physicians and pharmacists, \$150; residents and nurse practitioners, \$75.

For information contact Norma Wilcox, A. Webb Roberts Center for Continuing Education, 3500 Gaston Ave., Dallas, TX 75246, Tel. (214) 688-2166.

DUKE UNIVERSITY MEDICAL CENTER

Oct. 23-27 Current Concepts in Diagnostic Radiology including Ultrasound and CT Scanning—Southampton Princess Hotel, Bermuda. *Credit:* 30 hours AMA Category 1. *Fee:* physicians, \$250; in training, \$125.

For information contact Robert McLelland, M.D., Radiology—Box 3808, Duke University Medical Center, Durham NC 27710, Tel. (919) 684-4397.

WEST PARK HOSPITAL
Canoga Park, California

Oct. 14-22 3rd Annual International Body Imaging Conference—Maui Surf Hotel, Maui, Hawaii. *Credit:* 25 hours AMA Category 1. *Fee:* physicians, \$295; residents and technologists, \$195.

For information contact Ronald J. Friedman, M.D., Conference Coordinator, 3rd Annual Int'l. Body Imaging Conference, West Park Hospital, 22141 Roscoe Blvd., Canoga Park, CA 91304.

**NETWORK FOR CONTINUING
MEDICAL EDUCATION**

Schedule for Upcoming Programs

- July 10- Aug. 6 The Five Phases of Acute Myocardial Infarction—with J. O'Neal Humphries, M.D., and Bernadine H. Bulkley, M.D., John Hopkins Hospital and School of Medicine, Baltimore (1 hour AAFP Prescribed credit)
- Aug. 7- Sept. 3 Edema: Causes and Treatment—with George A. Porter, M.D., University of Oregon Health Sciences Center, Portland.

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Charles D. Kennedy, M.D.

Clinical Psychology

Thomas L. Cory, Ph.D.
Jerry C. Gilliland, Ph.D.
Ann Morris, M.S.
Bobby G. Rouse, Ph.D.
Roy Smith, Ph.D.

Adjunctive Therapy
Dan B. Page, M.Ed.

Administrator
Dennis P. Dobard

AMA Revises Anatomy Book for Children

Interesting information about the body, how it is made and how it works, is provided in the newly revised edition of the AMA's anatomy booklet for children 6 to 9 years old.

The booklet, "Your Body and How It Works," is designed for child and parent to read together. Simplified facts about each body function are presented. The book is aimed at fostering wholesome attitudes toward the body and an interest in taking care of it. Simple drawings and medical illustrations are accompanied by text describing the cell, the skin, the hair, internal organs, the bones, the muscles, the brain and nerves. A section on care of the teeth is included, along with simple information on foods and nutrition. The booklet concludes with a self-test for the young readers.

The booklet was written by Sandra Malanga of the AMA's Department of Health Education. Single copies are available from the American Medical Association, Order Department OP-176, P.O. Box 821, Monroe, WI 53566. Single copies are \$1.50.

Carbon Monoxide Is Danger In Airtight Dwellings

"Airtight" insulation and weather-stripping saves on the fuel bills, but it also might be extremely dangerous. With no fresh air getting in the house carbon monoxide poisoning from a faulty heating system could be fatal. The increasing number of cases may be related to the recent fuel crisis and the change in heating and insulation methods. While there is a natural tendency toward "airtight" insulation of homes, it is clear that adequate flow of air must be provided for complete ventilation of the heating element.

Carbon monoxide poisoning sometimes is difficult to diagnose. The symptoms—nausea, dizziness and headache—are common to many other illnesses. In a series of 12 patients, all exposed to poisonous atmosphere for more than 12 hours had small, flame-shaped surface hemorrhages on the retina of the eye, which might help the doctor determine that the illness was due to carbon monoxide. Because the symptoms resemble flu and other common illnesses, correct diagnosis was not made as promptly as it might have been. If the patient with flu-like symptoms also has bleeding in the retina, the physician may suspect carbon monoxide poisoning.

Americans May Have Too Much Iron in Diet

Americans may already have too much iron in their daily diet, and there certainly is no justification for further fortification of foods with iron, says an editorial in the May 12 issue of *JAMA*.

Too much iron may trigger hemochromatosis, which causes drastic changes in skin color, diabetes, liver troubles and heart failure. Untreated, it is fatal. Treatment is prolonged and difficult, entailing bleeding the patient weekly for up to two or more years.

The addition of extraneous chemicals to our diet is a topic of acrimonious controversy. Food additives, by and large, have probably done more good than harm. Iodine in salt to prevent goiter and vitamin D in milk to prevent rickets are two good examples. Salt in baby food and sugar in breakfast food are two examples not so good. The fortification of food with iron is a problem more complex than most others. It is intended to prevent iron deficiency, and the target population is menstruating women.

Women get rid of substantial quantities of iron during menstruation. The disorder of too much iron is largely a disease of men. Hemochromatosis is a hereditary disease. Those who urge caution in mandating increased fortification of the American diet suspect that iron may be detrimental to men who have inherited the tendency to accumulate too much iron in the body.

The editorial is in comment on a scientific research study published in the same issue, in which Swedish doctors report on a screening program to determine iron content in a population group. Five percent of the men had elevated iron levels, and in 2% the level was so high that they were in the early stage of the disease. No women had iron overload.

Discussion has been under way in the United States since 1970 regarding additional iron fortification of flour, under a proposal of the Food and Drug Administration. The regulation has not yet been adopted.

Abandon Radical Mastectomy For Breast Cancer

Radical mastectomy for breast cancer does not increase survival compared to more conservative operations and should be abandoned except in special circumstances, says a report in the April issue of *Archives of Surgery*.

"The question of what operation to use in the treatment of cancer of the breast has long been debated," say a team of Rockford, Illinois specialists.

Drs. Alfred C. Meyer and Simmons S. Smith of Rockford School of Medicine and Ms. Meredith Potter of Rockford College, have surveyed all women operated on in Rockford for breast cancer from

1924 to 1972 who could be followed for at least five years after surgery. Most of the patients were followed for ten years, or until death.

Many different surgeons were involved, and each used the type of operation he thought best. Some were radical mastectomy, some simple mastectomy, some modified radical mastectomy and a few simple removal of lumps. An analysis of 1,686 surgically treated carcinomas of the breast in one community showed no statistically significant differences in five- and ten-year survival for simple, modified radical, or radical mastectomy.

Likelihood of cancer developing in the opposite breast decreased from 21% among women younger than age 30 to 5% among those 80 or older. Average for the entire group was 8%.

There is no appreciable difference in ten-year survival in the age range of 35 to 75 years, but the disease seems milder in older women who approach their normal life expectancy.

Behavior Modification Aids Obese Children to Reduce

Behavioral therapy offers new promise in helping obese children to get rid of the excess pounds, says a report in the April issue of *American Journal of Diseases of Children*.

Thirty percent of men and 40% of women aged 40 to 49 have been considered obese by the criterion of weighing 20% more than desirable weight, and at least 25% of all children are obese.

The central element in behavioral weight control is slowing the rate of eating. Slower rate helps obese people control their food intake.

Leg-and-Heel Technique Aids Heart Attack Victims

Use of the heel and leg to apply external heart compression in first aid for heart attack victims works.

External heart compression usually is applied by pressing sharply and rapidly on the chest with the heel of the hand. This requires a good deal of strength, since an adult victim must be compressed one and one half to two inches. And it must be done rapidly, 60 times a minute. Slender, weak or fatigued rescuers may not be able to depress the victim's sternum sufficiently.

A research project was set up with 20 medical students. Each was instructed in the leg-heel method of external heart compression. First step is to remove shoes. Then each student practiced on a training mannequin equipped with a light that indicated correct or incorrect technique. The rescuer stands beside the victim, who is laid prone on the floor.

The students attempted resuscitation by both leg-heel and hand-arm techniques. The study found that lighter weight individuals could do a better job with the leg-heel approach. One 110-pound female

student, for instance, was significantly more successful in compressing the mannequin with the leg-heel than hand-arm method.

The leg-heel method cannot be used when a single rescuer has to provide both cardiac compression and mouth-to-mouth resuscitation.

The leg-heel method seems attractive for long-lasting resuscitation because the rescuer can alternate legs and use his or her body weight more effectively for compression.

But this new technique is not yet ready for general use. It needs to be further tested in the laboratory and tried in the field before it can be recommended as a safe alternative to the well-established arm-hand technique of external heart compression.

LAB EQUIPMENT FOR SALE

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TOM E. NESBITT, M.D.
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Tom E. Nesbitt, M.D. *An Editorial*

JOHN B. THOMISON, M.D.

In 1857, ten years after its founding, the American Medical Association elected Nashville surgeon Paul F. Eve its president, the first of a distinguished line of Tennessee physicians to hold that office. The most recent, Tom E. Nesbitt, a Nashville urologist, was installed June 21 as the 133rd AMA president, the eighth from Nashville. Those are the bare facts.

Now to flesh it out.

Tom E. Nesbitt was born in Magnum, Okla., April 14, 1923, and attended the public schools in Tulsa. His college days were spent at the University of Tulsa and Louisiana State University, after which he received his MD degree from the University of Texas, Southwestern Medical College in Dallas in 1945. After an internship and surgical and urological residencies at the University of Michigan he entered private practice in Milwaukee, coming to Nashville three years later, where he has been in the private practice of urology since 1957.

He began his service to organized medicine as secretary of the Nashville Academy of Medicine, a post he held for three years, and in 1961 he became a member of the TMA House of Delegates, which he served as Vice-Speaker for four years and Speaker for three years. In 1969 he became TMA President-Elect and its President in 1970.

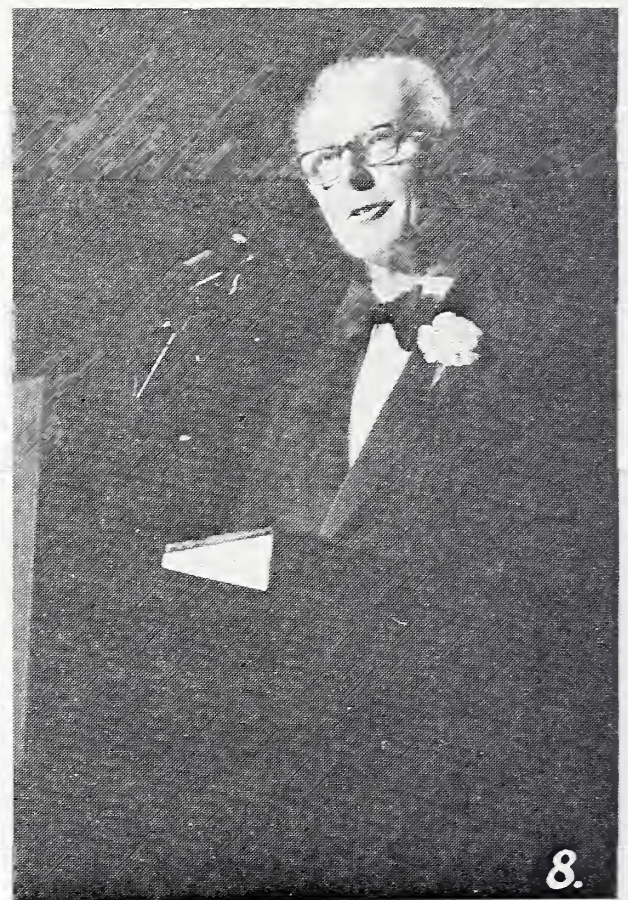
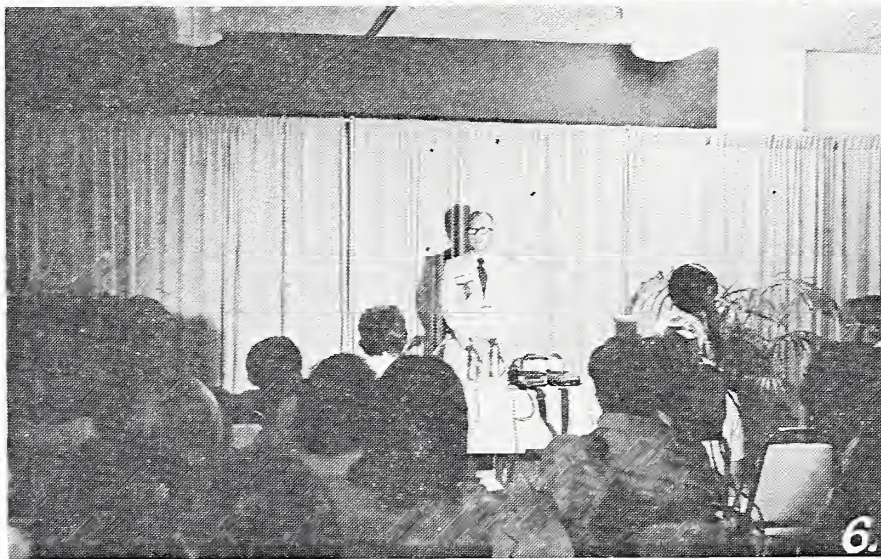
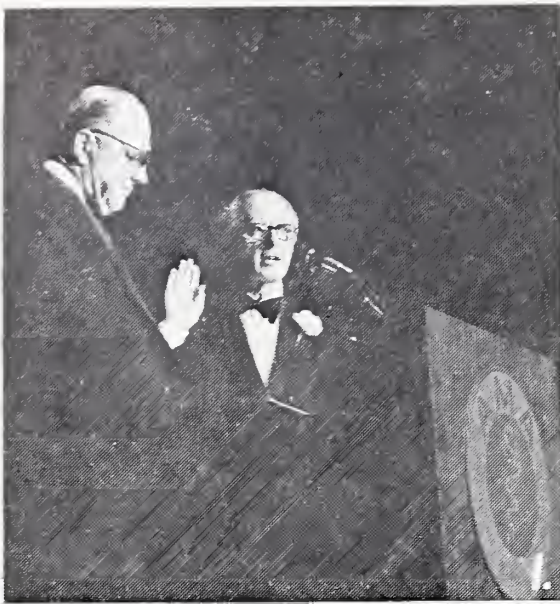
In 1967 he was elected a delegate to the AMA, where he served as a member of the Committee on Private Practice and also served on the AMA Speakers Bureau on National Health Insurance. He became Vice-Speaker of the House of Delegates in 1972 and Speaker in 1973, serving until his unanimous election as President-Elect last year. He has also been a member of the Coordinating Council on Medical Education since its formation in 1971, and served as its chairman in 1974. He is an assistant clinical professor of surgery, urology, at Vanderbilt Medical School and an associate clinical professor of surgery, urology, at Meharry Medical College.

Now all that is very prosaic and very formal, though it needs to be said. It is only an outline,

though, which gives just the barest intimation of the hard work involved. It says nothing of the myriad of speaking engagements, cold dinners, lonely hotel rooms, smoke-filled meeting halls, and midnight oil which went with it. Tom thrives on hard work, and there has been plenty of it. Behind him have stood his lovely family, made up of his wife Liz, son Tom, Jr., a new MD, Missy, a nurse in a Nashville hospital, Jon, who has just finished his first year in medicine at Georgetown, and Betsy, who is in the nursing program at Vanderbilt. He is also backed up by his several associates, who have taken up the slack.

Tom is a fighter, as indicated by his record, and he recognizes he has a fight on his hands, as indicated by his inaugural address. But also indicated by his record is a conciliatory nature, and his willingness to listen to other views and the ability to dispassionately debate the issues with individuals holding those views is perfectly exemplified by his cochairing with Sen. Edward Kennedy a national conference on Positive Health Strategies.

In the summer of 1968 Tom, then Speaker of the TMA House of Delegates and a member of the Tennessee delegation to the AMA, was instrumental in the formation of the TMA Committee on Continuing Medical Education with Rudolph Kampmeier, M.D., as chairman. Tom's interest in education and his anticipation of the activities of the federal government in the area of physician continuing education and recertification gave Tennessee a head start in the accreditation program, so that in 1972, when the TMA CME committee was approved for accreditation of CME programs in Tennessee, only California had moved farther in that venture. This typifies the vision and energy which Tom has brought to organized medicine, which made him one of the most effective Speakers the AMA House of Delegates ever had, which last year made him the unopposed candidate for President-Elect of the AMA, and which will stand American medicine in good stead during this year of his Presidency.



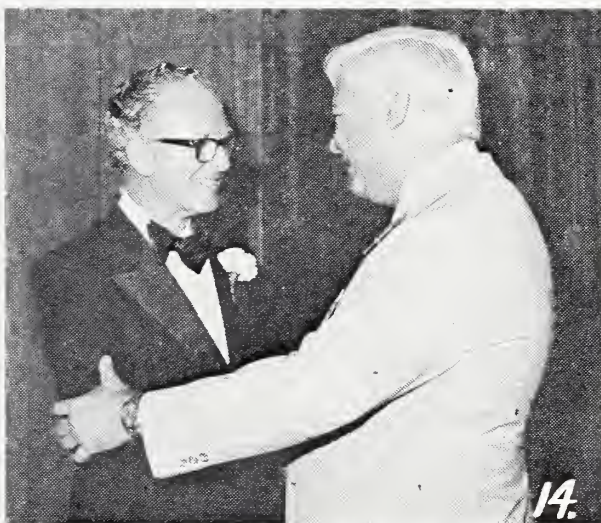
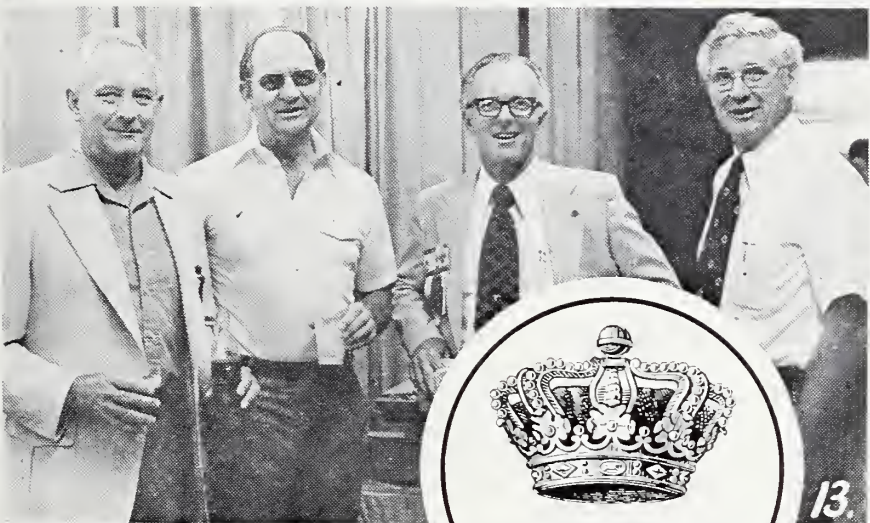


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Our Federation: Stronger Than Ever

TOM E. NESBITT, M.D.
President
American Medical Association

I begin my formal remarks this evening by assuring you that I have given a great deal of time and thought to this, my first message as President of the American Medical Association.

I thought of the high honor that election to this office signifies, and I extend to you my sincere gratitude for that honor.

I thought of the heavy responsibilities that the coming year will bring in this time of ordeal, and opportunity, for American medicine.

And I extend to you my promise to do my utmost to help fulfill those responsibilities.

I also thought about, and summoned up the fortitude to talk about, what to my mind is *the* most imposing challenge for physicians today. I'm referring to the need for individual physicians, in their own private practices, to voluntarily restrain the rate of professional fee increases.

I'm well aware that, historically, any discussion of the individual physician's right to determine professional fee levels has been all but forbidden ground for an officer of the AMA.

Despite that fact, I'm going to make this request a focal point, not only of this inaugural, but also a focal point of my message to America's physicians during the coming year. And while this message will be informal to the extent that it calls only for voluntary responses by individual physicians, there are some very compelling reasons why physicians should comply.

If certain proposals now in the Congress are enacted, for example, the forbidden ground of professional fees will become a playground for legislators, economists, health planners, consumers, and whomever.

I refer, of course, to the legislative proposals which would impose arbitrary revenue restraints

on hospitals, and perhaps extend such restraints to private practice, as some have proposed; if these proposals are enacted, then we can forget all the rhetoric about issues such as health planning guidelines and national health insurance.

Because if government controls over hospital revenues and professional fees are added to existing controls arising from government's substantial health insurance financing commitments, then for all practical purposes government will in fact control the quality and the quantity (in terms of access) of the medical care system as a whole.

In short, the rationing of care, *a la* the British National Health Service, will be imposed on America. And while recent polls show that a majority of Americans favor national health in-

The most imposing challenge for physicians today . . . [is] for individual physicians to voluntarily restrain the rate of professional fee increases in their own private practices.

urance, they are against a national health service—financed through higher taxes and controlled by Washington.

To preclude such an eventuality, however, the private sector must provide effective voluntary alternatives, including cost control alternatives.

And—as an officer of the AMA *and* a practicing physician—concern for the future of our profession prompts me to ask individual physicians, too, to demonstrate their sincerity by restraining the rate of professional fee increases.

Parenthetically, I believe that asking for such voluntary restraints by physicians is as reasonable as it is pivotal.

It is reasonable because of the recent opinion polls which show that a majority of physicians, along with a majority of the general public, agree

Dr. Nesbitt presented this address upon his inauguration as President of the American Medical Association at the 127th Annual Convention of the AMA, St. Louis, June 21, 1978.

that the major health care concerns in our society today revolve around the cost issue.

It is reasonable because I am not—I repeat, I am *not*—asking each physician in this country to suddenly make an across-the-board reduction in specific fees for specific professional services.

We physicians, after all, are not exempt from the hard realities of today's economy. We, too, are subject to higher overhead costs due to factors such as rising prices for heating fuel and medical supplies, employee wage increases and the general inflationary spiral; and these added costs necessitate periodic increases in our professional fees.

While . . . a majority of Americans favor national health insurance, they are against a national health service. . . .

What each of us can do, however, is place realistic restraints on the rate of these periodic escalations, realistic in terms of allowing us to cope with the effects of inflation while maintaining the quality of patient care.

This request is reasonable because it is asking no more of individual physicians than what we are asking of other components of the medical system. If we expect hospitals to reduce their rate of spending increases by two percentage points in each of the next two years, for example, then it is proper for us to demonstrate our own sincerity and good faith by moderating our fee escalation rates.

I should add that for most of us, the resulting financial difference itself would be moderate since it would be merely an extension of an already existing downward trend in the rate of professional fee increases.

Evidence of this downward trend is provided by the Consumer Price Index (or CPI) of the U.S. Department of Labor which reveals that the rate of increase in physician fees has been declining since 1975.

The CPI does show that during the year immediately following the end of federal price controls (between May of 1974 and May of 1975), physician fees increased 13.2%. But the "catching up" associated with the end of price controls has substantially moderated since then.

During 1977, for example, the rate of increase in physician fees was 9.2%, or 4 percentage points *less* than the rate for the 12-month period

ending in May, 1975.

For purposes of comparison, and using the same time frames, increases in the "all items" component of the CPI dropped from 9.5% to 6.8%.

In short, if each physician can moderate annual fee increase rates by just 1% in each of the next two years, our fee escalation rate would be close to the "all items" rate—perhaps even under it if recent all-items price increases continue.

So by merely extending an existing trend, we can provide ourselves with a very visible—and extremely persuasive—argument in our struggle to preserve our pluralistic medical care system, which emphasizes voluntary problem-solving by the private sector.

The most formidable challenge by far facing American medicine in the coming months and years will be to deal forcefully with the cost problem which, in the final analysis, means forceful action by each physician.

In that respect, my request for professional fee restraints may be unreasonable to the extent that many physicians simply don't know how to moderate the costs of medical practice . . . and hence their fees. In this regard, there is a wide variety of possible approaches.

For example, the AMA will sponsor 202 practice management workshops across the nation this year. Offering sound advice on improved efficiency and productivity in medical practice, it is estimated that increased office efficiency alone can reduce practice costs by as much as 5%.

The most formidable challenge . . . will be to deal forcefully with the cost problem which . . . means forceful action by each physician.

Other possible answers have been suggested by the National Commission on the Cost of Medical Care. Certainly their recommendations already have been given considerable attention at this Annual Convention.

Basically, the Commission stresses the importance of participation by individual physicians in local cost moderation efforts, many of which are applicable to the physician's office, as well as to the hospital.

Local peer review and utilization review programs are cases in point. Reasonable guidelines for medical care, based on necessity as well as

quality, can help reduce costs. But only if individual physicians participate in, and abide by, the development and dissemination of these guidelines.

Of course, the real medical needs of patients must continue to receive the highest priority, whether in the hospital or in our offices.

Nevertheless, rough guidelines for determining the necessity and appropriateness of medical care can serve as a rough yardstick for individual physicians in assessing patient needs before, and after, hospitalization.

Some in government are determined to ignore the irrefutable fact . . . that we cannot provide high-quality care for less than its basic cost.

Furthermore, other segments of our society (notably government and the public-at-large) have to be more responsible in their approaches to cost moderation—with the emphasis on “responsible.”

Certainly the Carter administration’s proposal to slap a flat, arbitrary limit on hospital revenues would be *irresponsible*.

By contrast, in my view the current Voluntary Effort is responsible. While on this subject, one cannot help but speculate as to the motivation, and hypocrisy, behind a recent decision by the Carter-Califano team. I’m referring to their specious decision to call for voluntary restraints by industry on the one hand, while attempting to sabotage our own Voluntary Effort on the other hand, by asking the Justice Department to *not* grant us an exemption from potential antitrust action.

Apparently, some people in government are determined to ignore the irrefutable fact in medicine, namely that we cannot provide high-quality care to patients for less than its basic cost.

Meanwhile, our society must somehow persuade Americans that more healthful lifestyles can do more to reduce medical costs than all other efforts combined. We will take a step in that direction next month at the Joint Conference on Positive Health Strategies developed by the AMA and Senator Kennedy.

It will be my privilege to join the senator in

cochairing the conference, which will be held July 25-27 in Washington, D.C.

The conference itself, cosponsored by 12 other national organizations broadly representative of our society, will focus on positive health strategies for schools, communities and the work place . . . as well as possible health action programs for the future.

But, to me, the conference also demonstrates that representatives of the private and the public sectors *can* put aside their differences, and in mutual good faith seek practical solutions to real health care problems.

This is in stark contrast to the reprehensible attitude recently displayed by President Carter when he attacked the professions and private institutions, including lawyers, physicians and the AMA.

In a letter of response, the AMA reminded Mr. Carter of this Association’s manifold accomplishments in promoting good health and high-quality medical care for the American people. Our response also deplored the questionable logic of impugning the good faith of physicians at a time when mutual action by the public and private sectors is so essential to the resolution of problems.

The White House also was struck by some well-placed editorial shots from the news media. The *Washington Post* took special aim at the President’s seeming reluctance to “let doctors organize into the AMA.” In a lead editorial the

Rather than make gratuitous attacks on private sector professions and institutions, the President would be better advised to devote his energies to . . . the thus-far futile pursuit of his own campaign promises. But if it’s a fight Mr. Carter wants—then it’s a fight he’ll get!

Post emphasized that, “The verb ‘let’ has an unwholesome connotation as though the right to organize could be extended or revoked as someone saw fit.”

I believe the *Post’s* analysis might be extended by reminding Mr. Carter that America is built on democratic principles, with a small “d.”

Not the least of these principles is that strong, vigorous private associations serve as a check, and a balance, against the unreasonable growth of

government and the unreasonable exercise of power and arrogance often attached thereto.

Therefore, it seems to me that rather than make gratuitous attacks on private sector professions and institutions, the President would be better advised to devote his energies to more constructive pursuits—including the thus-far futile pursuit of his own campaign promises.

But if it's a fight that Mr. Carter wants—then it's a fight he'll get!

Because we physicians are well advised to continue our struggle to avoid the pitfalls inherent in governmentalized medicine. For example, during recent AMA-sponsored trips to study health care systems in Europe and the Far East, these pitfalls truly became apparent.

Any government-enacted and government-dominated health care insurance program inevitably results in significant reductions in the quality—and ultimately the quantity—of medical services available to patients.

And this reduction may have several manifestations such as cutbacks in research, detrimental changes in the curricula and length of training of physicians, and diminished quality in terms of a nonavailability of the modern medical technology that Americans have come to take for granted. The upshot of all this would be a reduction—or rationing—in the quantity of medical services available to patients.

This is evident in Great Britain; it is dramatically illustrated in the People's Republic of China; and it is currently being confronted as a crucial issue by the medical associations of Japan and Australia.

Every physician shares in the responsibility to help our society make the right choices.

And, of course, it has obvious implications for the "Great Health Care Debate" here in our own country. In all areas, not just in medicine, our society—like other societies—is facing the difficult task of seeking an accommodation between the virtually unlimited wants and needs of individual citizens, and the limited resources—financial and otherwise—available to fulfill those wants and meet those needs.

It should be obvious that every physician shares in the responsibility to help our society make the right choices.

Both as individual practitioners, and as a profession made strong through this medical federation of ours, we must help fashion practical, effective answers to problems, with no little emphasis on voluntary answers to cost problems.

I say all this knowing full well that we can be discouraged by the difficulty of reaching a consensus on the right choices even among ourselves, much less a consensus with other segments of our society including government.

[The Federation] is stronger as both protector, and promoter, of American medicine's superb, healing quality in medical education and practice [than ever before] and it's squarely up to you and me . . . to keep it that way!

The adoption of new policies, after all, often creates disagreement both within and without the profession, as the delegates at this Annual Meeting can attest.

We can also be discouraged by those critics who insist that this Association is a doddering, debilitated relic of the past. Well, I have a couple of appropriate, closing quotations which offer large measures of reassurance.

The first one pointed out:

Doubtless each member of the House has an opinion . . . on each of the various issues which may be considered at this session of the House. It is reasonable to expect these opinions to conflict to some extent when we think of the wide variations in the local problems (of) various communities throughout the country.

That statement was made 40 years ago by Dr. Harrison Shoulders, who was then Speaker of the House, and who subsequently preceded me as an AMA President from Nashville, Tenn.

The second quotation goes like this:

It is no secret that there has been an attempt in various places to lead the American people to believe that the (AMA) is not representative of the American medical profession, that it is a weakened, disrupted, failing organization.

And yes, that statement, too, is 40 years old, made in 1938 by Dr. Irvin Abell, then President of the AMA.

For decades, then, critics have been greatly exaggerating the death of the AMA; and the reason they do so is that to impose their own

social views on the public, they must first seek to discredit their strongest rivals. And this federation of ours is much stronger in 1978 than it was in 1938.


It is stronger in its support for continued rivalry between the public and the private sectors, which is healthy for democracy as a whole.

It is stronger in terms of its pragmatic policies,

programs, and proposals to deal with contemporary health care problems.

It is stronger as both protector, and promoter, of American medicine's superb, healing quality in medical education and practice.

And it's squarely up to you, and me, and every physician in this country worth the name to keep it that way!

You have my unqualified pledge to disseminate these truths during the coming year. 

HOW TO SCREEN YOUR CANDIDATES

The following questionnaire was developed by MEDPAC on issues of interest to medicine to be answered by candidates for the 1978 Tennessee General Assembly. It is a useful guide for us as we make our decisions on who to support and who to vote for this fall.

Cost of Care

- Do you feel the state should establish an entity, i.e. commission, panel, etc., to review and determine rates to be charged for hospital care in Tennessee?
- Do you support legislation which would require prior state approval and authorization for the purchase of major medical equipment by a physician for use in his office, i.e. "certificate of need" review?
- Should the state reimburse physicians for the treatment of *Medicaid* patients at the same rate of reimbursement paid by the federal government for the treatment of *Medicare* patients?

Professionalism

- Do you support legislation expanding the definition of chiropractic which would allow chiropractors to do such things as physical examinations, draw blood for analysis, and to do x-rays?
- Do you support legislation mandating reimbursement for chiropractic services in all health insurance policies issued in Tennessee?
- Do you feel the state should allow physicians to advertise fees and services through the media?
- Do you feel a pharmacist should have the right to fill prescriptions for medication with drugs other than those written by a physician?

Medical Education

- Do you feel students planning to attend medical schools funded by the state should be required to contractually agree to practice in Tennessee for a specified period as a prerequisite to admission?

Malpractice

- Do you support legislation requiring that a plaintiff be held responsible for all court costs, including defense costs, in cases declared "frivolous" in a court of law?
- Do you support legislation amending the statute of limitations for minors, so that the statute begins to run at age 8 rather than at age of majority, which is age 18?

General

- Do you support legislation establishing a so-called "Living Will"?
- Do you support legislation allowing the distribution and sale of "laetrile" in Tennessee?

AMA St. Louis: The 127th and Last Convention

JOHN B. THOMISON, M.D.

In a moment of boredom in my hotel room in the Gateway City I learned that St. Louis has been the site of some notable firsts. Forty-two of them are listed in the front of the *Guest Service Directory* under the heading "St. Louis Did It First." The "firsts" include expedition to the Pacific Coast (Lewis & Clark), 1804; steel arch bridge, 1874; adding machine marketed, 1888; diesel engine built for commercial service, 1898; and the practice of orthodontics as a dental specialty, 1900. The year 1904 had eight. It was the year of the first Olympic celebration in the United States (Third Olympiad) and also included the first ice cream cone, controlled balloon flight, iced tea, hot dog, and hamburger. Subsequently there were the first gasoline station (1905), parachute jump from an airplane (1912), National Weather Bureau report by radio (1923), Lindberg trans-Atlantic flight to Paris (1927), lung removal (Evarts Graham, 1933, at Barnes Hospital), mobile telephone commercial service (1946), husband and wife to receive a Nobel Award (Carl and Gerty Cori, Washington University, 1947), and the first home run for Hank Aaron (1954). The impressive list ended in 1962 with the production of the first manned orbital spacecraft (Mercury).

After 15 years in the doldrums, St. Louis was the site of a notable last—the last Annual Convention of the American Medical Association to combine a meeting of the House of Delegates and the Scientific Program. From many aspects, St. Louis is not what one would call an ideal place to have a convention in mid-June. It was hot and humid, and the downtown is run down, but is being torn down—by whole blocks. One was remarked that St. Louis was the Gateway to the West because they left the gate open and nobody wanted to stop there. As a matter of record, though, a lot of people obviously did stop there, and St. Louis was a thriving city until the past

two or three decades, when along with a lot of other American cities it hit the skids. But it is doing its best to make a comeback, and I believe successfully. The convention facilities are superbly housed in a new convention center located in what is to be a major shopping area—now an expanse of vacant lots—adjacent to Gateway Park, presently still under construction surrounding the impressive Gateway Arch.

Taken all in all, the AMA's last convention was a success, and the lagniappe for Tennesseans was, of course, the inauguration of Tom Nesbitt as the 133rd president of the AMA. It was attended by nearly a hundred Nashvillians, many of whom arrived by bus the evening before to attend a "Tom Roast" at the Women's Club of St. Louis. Many others flew in on the day of the inauguration to fill about 15 rows of seats at the left front of the ballroom of the Chase-Park Plaza, just in front of the bandstand manned by Danny Davis and the Nashville Brass, who put on a memorable show and concert for the assembled celebrants, several thousand strong. The inauguration was followed by an impressive, and also "pressive," reception, at which there was barely enough room for the guests to lift hand to mouth.

This moment of celebration was a small rest stop on a mountain of work accomplished by our delegation, which began with a Sunday morning caucus and ended at 1 PM on Thursday. The intervening days began with breakfast caucus meetings at 7 AM. I have always been impressed by the hard work, including homework, of our delegation. Though this has not in the past been duplicated by some of the other delegations, lately I have also been impressed by the preparation of the delegations generally. The exemplary performance year in and year out of one of our delegates has resulted in his being lost to the delegation, as John Burkhart was appointed to a five-year term on the Judicial Council, an honor

both to himself and to Tennessee.

The House was inundated by the addition to an already full agenda of the massive Report of the National Commission on the Cost of Medical Care, and the response of the Board of Trustees to its 48 recommendations. The House deliberations bogged down badly in places, but just when it seemed debate would never terminate the action would speed up, only to bog down again. This was repeated time and again throughout the 2½ days of the session, but with a final burst of speed on Thursday morning, interrupted repeatedly by elections, in which the House voted Hoyt Gardner of Kentucky the AMA's next president, the 127th Annual Convention of the AMA wound up almost on schedule.

What with 165 resolutions and innumerable reports from the Board and the various councils and committees it is obviously impossible to even begin to report here all that went on, and anyway you will already have had the opportunity to read about the House action in the *AM News*. I wish simply to give you some of my impressions of what seemed to be the highlights of the St. Louis convention, and to review and editorialize on some of the many reports of the Board and councils.

Last year specialty sections were abolished, and this year for the first time representatives from each of the 50 recognized specialty societies were seated as delegates. As this has more than doubled the number of specialty delegates, it will doubtless add to the amount of debate, but for the most part it did not seem to be a problem.

National Commission on the Cost of Medical Care Report

To begin with, I intend to give the Commission Report short shrift here. The report summary, which summarizes three massive volumes, is itself 15 printed pages long and has been reproduced previously in its entirety in *AM News*. The various councils studied and reported on it, and the Board of Trustees made recommendations, submitted as their Report A. Each recommendation was considered by one of the reference committees of the House and reported out for discussion. In general the House went along with the Board's recommendations, except that there were a few delegates who wanted no part of any of it, and there were a few rough spots, which were rejected. It was a significant step taken by the

voluntary sector toward control of escalation of health costs, and coupled with the plea by President Nesbitt in his inaugural address (printed in this issue) that physicians work to slow the escalation of medical fees, should indicate to the public organized medicine's desire to help reduce costs without sacrificing quality of care.

The House endorsed 29 of the Board's recommendations and 22 of them went back to the Board for implementation or further study. The House affirmed its belief that "the greatest hope for cost containment in the provision of health care lies in strengthening price consciousness in the health care marketplace." Much criticism in the course of the discussion, however, was aimed at the inflationary forces in the economy, particularly runaway government spending, with comments that it is unfair to impose restrictions on only one aspect of the economy.

The matter was addressed again by a report from the Board on the **Voluntary Cost Containment Program** established in response to the challenge last year from Rep. Dan Rostenkowski (D.-Ill.) to halt escalating hospital costs. This was seen as an alternative action by the private sector to the administration's 9% cost cap legislation proposal. Progress on this program, now known as "VE" (Voluntary Effort), has been rapid. A national steering committee was set up by AMA, the Blue plans, and the Health Insurance Association of America, with representatives from business and the consumer population. The steering committee has developed a set of "guidelines" for use by state steering committees (Appendix A), encouraged the establishment of state steering committees as well as endorsement by individual hospital administrations and medical staffs, and developed a broad base of support within the health profession.

The administration refuses to be reassured, though, as it, represented by Secretary Califano, has determined that physicians, especially the AMA, are not sincere, and that no effort on the part of organized medicine should be considered—or even allowed. This in the face of some notable early success on the part of VE in decreasing the growth rate of both expenses and revenue, and in fact, "it appears that, if undeterred, the voluntary effort will indeed achieve the goals for reduction in hospital expenditures growth rates suggested by the national steering committee" (B. of T. Rep. FF, A-78, p. 5). But then Mr. Califano is interested in quality only insofar as it is cheap, and government controlled.

Principles of Medical Ethics

The proposed revision of the *Principles of Medical Ethics* of the AMA, was considered in a report from the Judicial Council, which stated that comments they had received had favored the revised code over the old one by a margin of over 2 to 1. A major improvement was felt by a majority of those favoring it to be the elimination of gender in referring to physicians. You will recall the revised code was rejected by our own House of Delegates in April, and because we were joined by a number of other states, the Judicial Council felt the Principles needed to be more thoroughly and widely considered, so as to be as widely accepted as possible when a revision is adopted. It therefore asked the House to appoint a committee from the House and the Board to study the matter, receive suggestions, and then meet with the Council. It would report back to the House at its next meeting, which will be in December in Chicago. This was accepted by the House.

Section 3 of the revised Principles received special consideration, as it would remove the section which states that a physician should not voluntarily associate himself professionally with anyone who practices a method of healing not based on scientific principles. There is currently antitrust legislation pending against the AMA and several specialty societies which bears on this principle, and wording of the opinions of the Judicial Council has been "carefully put to satisfy the interests of science, legal requirements, and all physicians' professional responsibility to patients."

It is important to remember that "under the Bylaws the decisions of the Judicial Council are final as to those matters over which it has jurisdiction," and "the Judicial Council has original jurisdiction in 'the establishment of principles and interpretation of medical ethics.'" *The final wording of the Principles will be whatever the Judicial Council decides it must be.* The House can accept it, or refer it back to the Council. It cannot change it. It is also important to remember that because of current antitrust laws, which can award triple monetary damages to the aggrieved, we do not live in the best of all possible worlds, and cannot therefore always act as we wish unless we are willing to accept those consequences. The Judicial Council, the Board of Trustees, and the House—and ultimately all of us—must walk the fine line which satisfies legal requirements and yet still protects our patients.

Insurance and Medical Service

Reference Committee A had referred to it items having to do with insurance and medical service. As major portions of Report A of the Board of Trustees, responding to the Commission Report, were considered by this reference committee, it worked all night getting its report ready, an imposition recognized by the Speakers, who promised to be more careful of their scheduling in the future.

One of the most pressing problems facing medicine at the moment is the implementation of the **Health Planning Act**. This was addressed by a report from an ad hoc committee on health planning of the Council on Medical Services (CMS) as well as by several resolutions. The House directed that the report (CMS Rep. F, A-78) received wide circulation among the membership for its close perusal. The committee was established as a resource and strategy center to assist physicians and medical societies involved at the state and local levels with HSAs and to assist in developing future national legislation to replace the present act. It is currently developing for distribution early in 1979 a *Federation Guidebook on Health Planning* which will give and continually update comprehensive coverage of the act and all its implications, and is exploring the possibility of sponsoring a number of regional workshops on health planning, the first projected tentatively for September, 1978. It has also assisted the Council on Legislation in review and preparation of AMA comments on current National Guidelines on Health Planning, and has established liaison with HEW officials responsible for health planning. The committee has been responsible for drafting amendments to the act and working out compromise legislation.

I anticipate this report will become available soon, possibly even before you receive this six weeks from now, and probably in *AM News*. I commend it to your intensive study, as it bears heavily upon the future of your practice and the welfare of your patients, as the HEW, by regulations published in the *Federal Register*, May 26, has established what is essentially an adversary relationship within HSAs between consumer and provider members, a situation most inimical to patient welfare, and destructive of proper implementation of the Act itself.

There were several reports and resolutions having to do with **medical fees, reimbursement under Medicare and Medicaid**, and the manner of billing for hospital services. Several were responding to

our persecution under one of the numerous areas of schizophrenia in government. On the one hand we are being asked to lower fees, and one method of doing so is by relative value studies and peer review of fee schedules. This has been ruled by the FTC as being in restraint of trade. The administration has requested the Justice Department to refuse the AMA's request to grant immunity from legal action for attempting to lower fees by peer review. We are therefore caught between the rock of HEW and the hard place of FTC with no hope of succor. These resolutions were referred to the Board for action, but of course the Board is already being frustrated in its attempts along this line.

Legislation

Reference Committee B had referred to it reports and resolutions having to do with legislation. Possibly the major item addressed was the **extension of certificate of need to private physicians' offices**. Two bills to accomplish this, HR 10460 and S 2410, are presently being considered by the 95th Congress. As this is a clear intrusion into the private practice of medicine, the AMA was asked to reaffirm its opposition to this intrusion, and to continue to actively oppose this legislation. The House so instructed the Board.

The FDA is currently promulgating **accepted uses for drugs**, and if current practice is extended to its logical conclusion, use of any drug in an "unapproved" (by the FDA) manner could be considered *prima facie* evidence of malpractice, and a physician could be faced with defending his action in court. A resolution was passed which would remind the Congress and HEW that the use of a medicine is a medical and not a political judgment, and that there are dangers in "attempting to restrict, by law or regulation, the use of drugs to the FDA-approved indications and to deny to physicians the use of drugs of choice for the best interest of his patients."

The House adopted a resolution to persuade the publishers of the *Physicians Desk Reference* (PDR) to include in a prominent place a disclaimer as to the legal effect of FDA-approved labeling, as the PDR is simply a compilation of package inserts of the drugs listed. It further voted to petition the FDA to adopt a standard paragraph to include with any publication of information contained in the official labeling of prescription drugs, to read substantially as fol-

lows:

This official labeling statement of necessity represents a summary of the information available upon which approval for marketing in interstate commerce of this drug product was based. This official labeling should not be regarded as a legal standard of acceptance or accepted medical practice nor as a substitute for clinical judgment or experience nor as a limitation on usage of the drug in medical practice. The official labeling statements approved by the Federal Food and Drug Administration establish the parameters governing advertising or promotion of the drug product.

HSA Boards again surfaced, this time in proposed changes in PL 93-641 which would increase physician representation on these boards. Although the AMA is already working toward this end, and amendments to the law are before the Congress, the House wished to go on record as reaffirming its stand and supporting the Board in this critical legislation.

The House referred to the Board five resolutions on **National Health Insurance** to determine if a new or substitute AMA bill is needed to replace AMA-sponsored HR 1818, the proposed Comprehensive Health Insurance Act of 1977. The House called for any new proposal for submission to the 1978 interim meeting to be circulated to the delegates as early as possible.

In what could be considered in one sense a futile effort and even perhaps a show of bravado, a move by the House gained credibility taken in light of the recently emerging "tax revolt" as it went on record in support of an amendment to the U.S. Constitution prohibiting deficit spending. This action made itself felt later in the convention when a section of a resolution calling for federal subsidization of a program was stricken when a delegate (our own Roy Tyrer) reminded the House it was inconsistent with this previous action.

Medical Education

Reference Committee C dealt with matters having to do with medical education. This is such a complex issue, having to do with manpower availability, recertification, and so on, that I intend to review the matter in a subsequent article in a later issue of the JOURNAL.

Hospitals and Medical Facilities

Reference Committee D had before it matters dealing with Hospitals and Medical Facilities. Considered were items of **cost containment** embodied in the Commission Report as addressed in

B. of T. Rep. A, and physicians were encouraged "to become knowledgeable about and to consider the cost, charge, and reimbursement mechanisms for hospital services." Other aspects of this issue have been addressed previously in this article.

A thorny issue at present concerns **the right of lay boards of trustees to mandate policy to medical staffs**. Inasmuch as the courts have, in the Darling case, ascribed ultimate responsibility for any occurrence in a hospital to its governing body, these bodies have tended to arrogate unto themselves final authority for everything, including the practice of medicine in the institution. Actually it is not that simple, as in practice if the hospital is sued, so is the attending physician, so that, in spite of some adverse comment by some of the delegates, who I could only conclude were themselves members of some hospital governing body, a resolution was adopted which invoked AMA support for "the right of all medical staffs to conduct the practice of medicine in all facilities . . . as set forth by the bylaws, rules, and regulations drawn up by the medical staffs and approved by the governing body; and that the AMA oppose any unilateral action of hospital boards of trustees that alters or bypasses previously adopted and approved medical staff bylaws, rules and regulations."

At the 1977 annual meeting, the Board of Trustees was directed to prepare policies and strategies to deal with **work stoppages**, including strikes. The Board responded in its Report H (A-78), adopted by the House, that because of the unpredictable nature of these events, it is extremely difficult to establish general policies and strategies. Instead, a "Department of Negotiations has been established to provide training, guidance, and counseling to medical societies and physicians in the alternative means of resolving disputes," and it has been active in this area since 1975. The Office of General Counsel keeps abreast of and provides information on new legislation and court decisions, and the Judicial Council is engaged in a continuing study of ethical considerations.

The report goes on to point out that Section 4 of the *Principles of Medical Ethics* of the AMA provides that physicians are to "observe all laws" and are to "uphold the dignity and honor of the medical profession. . . ." Section 5 states that "having undertaken the care of a patient" the physician "may not neglect him. . . ." Says the report, "Disputes with hospitals, employers, government, etc., do not excuse physicians who

neglect their patients. . . . Requests for aid in disputes involving physicians may be referred through county or state medical societies to the Department of Negotiations or the Office of General Counsel. The AMA is well prepared to respond promptly."

Along this same line, there was an extended debate on the old question as to whether house officers are students or employees of hospitals. As I have addressed this in a previous editorial (*J Tenn Med Assoc* 69:509, July 1976) I shall restrict discussion here. It is obviously to the medical schools' advantage to hold that house officers are students, and I could not avoid the impression that house officers were the victims of some internecine political warfare. It was repeatedly stated that "Doctors should not be unionized," as though the only alternative to being declared students, having once been placed under the National Labor Relations Board for arbitration, was to form a union. This certainly is not the case, as house officers can resort to the same methods as other physicians, namely, use of AMA's Department of Negotiations and its Office of General Counsel. Reason prevailed, and although it was admitted that house officers are both students and employees, the House ruled they are employees first, and need to be considered as such.

Science and Public Health

Referred to Committee E were scientific and public health matters. The House adopted a report by the Board that responded to a previous resolution calling for an AMA effort to promote exercise, which it has done in a number of ways, enumerated in the report (B. of T. Rep. Z, A-78). It states that findings as to the effects of exercise indicate there is persuasive evidence that "regular physical exercise may in some measure prevent manifestations of arteriosclerotic heart disease and that it certainly promotes psychological and physical well being in the healthy adult." It also called on a panel of cardiologists to give advice as to the proper indications for exercise prescriptions so as to differentiate between that exercise and exercise tolerance testing which can be properly considered medical cost and that which is purely recreation related.

In the same vein, the House adopted, in lieu of a number of resolutions which addressed the matter of **public health education**, a substitute resolution calling on the AMA and its membership to continue its leadership role in "developing and

promoting health education materials and programs to motivate Americans of all ages to maintain more healthful lifestyles and to assume more responsibility for the maintenance of personal health," and to "cooperate in coordination of the efforts in the public and private sectors to make health education more effective."

The problem of **restricted drugs** was addressed in two reports adopted by the House, Council of Scientific Affairs (CSA) Rep. A, A-78, on "Use of Barbiturates in Medical Practice," and CSA Rep. B, A-78 on "Heroin Reclassification." Concern has been expressed in many circles, especially in government, over outpatient use of **short-acting barbiturates**, particularly regarding suicide, although there is little evidence to indicate abuse is significantly related to medical use. The Council recommended therefore that the AMA oppose any attempt to remove short-acting barbiturates and other sedative-hypnotics from medical practice by rescheduling them from Schedule II to Schedule I of the Controlled Substances Act. It would, however, support an educational program for physicians to aid them in determining for each patient first whether any drug therapy is necessary, and if it is, whether a substance other than a sedative-hypnotic, such as a benzodiazepine (Librium or Valium), would serve as well. It warned that any drug regimen should be kept as brief as possible, as benzodiazepines also have a potential for abuse and dependency, and that each individual's drug use history and current behavior pattern be carefully evaluated before prescribing any drug.

Although **heroin** has been said to offer pain sufferers advantages over morphine, evidence for this is largely anecdotal, and the Council recommended that at least until the outcome of studies now underway becomes known heroin not be reclassified as Schedule II rather than Schedule I, inasmuch as such a rescheduling would not only appear not to offer physicians a more effective analgesic, but would significantly increase the problem of heroin control. It went on to add, though, that **chronic pain** sufferers often are deprived of adequate analgesia because of the fear of iatrogenic addiction, which should not be a proper concern in terminal cancer patients. Such patients should be kept comfortable, and a regular schedule should be adopted which would prevent pain, rather than a prn schedule simply for relief after the pain begins. Physicians who deal with

the problem of chronic pain should be trained in its management, and the Council recommended an expanded CME program on the subject.

The Judicial Council at the 1977 interim meeting was asked to study and report on Resolution 35 which addressed anticipated problems arising from a projected study by economists and health planners of the value of new methods of diagnosis and therapy, using "**Cost-Benefits Analysis**" and "Decision Theory" as the basis for their findings. The Judicial Council responded that it is difficult to reply to this general concept, as the resolution addresses no specific measures, and that in fact "all human activity involves such analysis as a matter of general theoretical economics." The Council believes that in such a context only specifics can be addressed, but that it presumes the matter of cost containment, certificates of need, capital expenditure limits, and price consciousness programs are at issue, which they believe have been adequately covered elsewhere, particularly in the Commission Report and the Board's response to it.

Although Reference Committee E recommended adoption of the Judicial Council Report B (A-78), the House found the report too superficial a look which was almost cavalier in its approach. The House saw in the situation the threat of a trade-off of dollars against lives, which was not addressed at all by the Council, nor were the questions asked in the previous resolution as to how, by whom, and whether at all ethical decisions concerning the withholding of proposed diagnostic and/or therapeutic measures can be made; and what were the implications of taking away such personal decisions as are now made cooperatively by the patient, his family and his physician, and placing such decisions in the hands of either physician or government or third-party payers alone. The House therefore sent the report back to the Council and the Board for further consideration of these questions.

At its 1976 clinical meeting the House called for an evaluation of the **health hazards of energy generating sources** to employees of energy-producing facilities and to the public in general. This was addressed by the Council on Scientific Affairs Report C. During the past decade energy consumption has been growing at a rate of 5% to 6% per annum and is expected to reach 344.6×10^{12} BTUs by 1980, with 20% produced from coal, 48.6% from oil, 19.5% from natural gas, 5.7% from hydroelectric, and 6.2% from nuclear power plants. By the year 2000, coal is estimated

to account for 12% and nuclear 20.7% worldwide.

In the past few years a number of elaborate studies have addressed the health and environmental impact of energy production, among them the AMA Congress on Environmental Health in 1973 and a study by Brookhaven National Laboratories. . . . Biomedical Assessment Division. Each fuel source can be broken down into multiple production and use modules, and, although sometimes with difficulty, the hazards assessed for each. The major areas of death and disability from coal are both occupational, in its extraction, and nonoccupational, in its pollution of the air. On balance, a coal-fired power plant each year results in 400 times as many deaths as an equivalent nuclear-powered generating station, 4 to 18 times as many as an oil-fired plant, and 300 to 1,500 times as many as one fueled by natural gas. Hydroelectric power was not considered, as its health impact is negligible unless a dam breaks.

For various reasons certain *alternative energy sources* were also not considered, such as gas hydrates ("frozen" natural gas), landfill and marsh methane, geothermal heat, solar energy, and windpower. Thermonuclear fusion is years away and has major problems, not only with radiation but also with high magnetic field hazards. There is also the problem, as with fission plants, of radioactive waste disposal.

With *nuclear sources*, it is difficult to obtain a realistic estimate of hazard because it must be based on work in animal models and on downward extrapolation, which is purely hypothetical, and must be viewed against the average external natural background radiation of 125 mrem/year. Adverse effects on health would occur only during and after a nuclear power plant disaster, which would be high in consequence but low in probability.

The *combustion of fossil fuels* may be loading the atmosphere and oceans with more CO₂ than they can absorb, and predictions have been made of increased global atmospheric temperatures which might result in drastic climatic changes, with unanticipated health effects.

"It appears that coal and nuclear power will be the principle fuels for electric power production for the next 25 years. At the present time, coal has a much greater adverse impact on health than does nuclear power production, and efforts need to be directed toward reducing both the health and adverse environment impacts of all

forms of energy production."

The Council on Scientific Affairs also addressed, in their Report F, the matter of **reliability of laboratory procedures** in response to 1976 Clinical Convention Resolution 84 which called on the AMA to respond directly to HEW on allegations of laboratory error, set forth in its "Forward Plan for Health, Fiscal Years 1978-82." The Council assembled a panel of scientists, which concluded, after extensive studies, that the allegations were not borne out, and that there was no evidence of the high rate of erroneous testing alleged in the publication. The panel recommended that the allegations be countered by a detailed exposition of current laboratory practice and procedures, and a monograph to accomplish this is entitled *Laboratory Testing in the Practice of Medicine*. It is now being prepared for the profession, and it is estimated it will be ready for publication in late 1978 or early 1979.

Report of the Board of Trustees G, entitled "Human Rights," makes reference to Section I of the AMA *Principles of Medical Ethics*, established shortly after the founding of the AMA in Philadelphia in 1847, which says:

The principal objective of the medical profession is to render service to humanity with full respect for the dignity of man. Physicians should merit the confidence of patients entrusted to their care, rendering to each a full measure of service and devotion.

The AMA has always been involved in the shaping of **international codes of medical ethics**. It was a founding member of the World Medical Association (WMA), and as such participated in the development of international declarations involving matters of *medical ethics and human rights*. In 1975 the WMA adopted the Declaration of Tokyo, which has to do with "*torture and other cruel, inhuman or degrading treatment or punishment in relation to detention and imprisonment*." As the AMA is no longer (since 1974) a member of the WMA, the Board of Trustees felt the Association should take action to endorse this declaration "as a significant step in drafting a global code to guide national governments," as numerous other groups have already done. A copy of the declaration is attached as Appendix B.

This very important issue was a casualty of the House's haste to adjourn. Board Chairman Robert Hunter, M.D., urged and the reference committee recommended that although there was

in the declaration some imprecise language regarding the definition of torture, the Tokyo Declaration be adopted. But when controversy arose, the House took the expedient, and to my mind cowardly, way out and referred the matter back to the Board.

The controversy centered around the possibility that because of the somewhat hazy definition of the word "torture," this declaration could possibly be used against "some" physician in malpractice litigation to say that because the physician did or did not do "something" he was thereby guilty of torturing his patient, and stood condemned by this declaration. All very theoretical and highly improbable—but possible.

I am going to speak plainly so as not to run any risk of being misunderstood. Torture—real torture—is going on worldwide, and physicians are being asked—required—to take part in it. The only defense some of our colleagues have may be the united front of world medicine in their support. American medicine has failed them. Anyone who considers the very remote possibility of a small nick in his own hide at the expense of his hard pressed—tortured—colleagues is a coward and undeserving of the title "Physician." His just desserts would be to have his insignia stripped away and be drummed out of the service.

I hope the next House will have the courage and the grace to redress the wrong this House was guilty of. I cannot believe this House would

have taken the course it did had it not put getting out of St. Louis ahead of its proper business.

The House actions ran the gamut of practically everything you can think of. The Board and councils work unceasingly throughout the year, working for our benefit, bringing to the House response to mandates of previous Houses, and making recommendations for further consideration and action in all aspects of medical practice.

A lot of items, other than what I have been able to discuss, and with which you should familiarize yourself, were discussed and acted upon. After all, the handbook of 8½x11 inch paper printed on both sides was 2½ inches thick. Having used it myself, I am familiar with the old dodge that this is "only medical politics." But you had better care, for whereas that head-in-sand approach may once have been possible, it is *your* neck on the line, and *your* patients who will suffer. And in case, for one reason or another you don't like or agree with the AMA, and don't belong to it, they are looking out after *your* neck and *your* patients. The AMA is *us* if we are members. If *you* are not, you should be.

One final word. With the adjournment of the Congress this fall, all pending legislation expires, as the 95th Congress will be no more. "The Council on Legislation will solicit the views and recommendations of state and specialty medical societies for the AMA's program in the next Congress." If you have thoughts about them, communicate them to TMA either directly or through your local societies. Remember—it's *your* neck and *your* patients' welfare which are on the line.

APPENDIX A

1. Establishment of state hospital-medical committees.
2. Immediate reassessment of budgets by individual hospitals.
3. A national goal of 2% reduction in the rate of increase in hospital expenditures each year for 1978 and 1979.
4. Individual hospital goals of maximum possible budget reduction consistent with sound medical practice and state goals based on assessment of state hospital expenditures and consideration of the national goal.
5. Reduction of the amount of new capital expenditure to 80% of the average of the three previous years.
6. Hospital medical staff reaffirmation of commitment to effective utilization review.
7. Study by state committees of ways to improve hospital productivity.
8. Acceleration of current trends in improvement of the health care delivery system through such methods as shared services, multihospital systems, primary care accessibility.
9. Communication of above objectives to hospital chief executives, medical staffs, and board chairmen and to state hospital and medical societies and allied associations.
10. Development of technical assistance programs for the state committees by the AMA, AHA, and FAH.
11. Support of the program by suppliers through price restraint and by purchasers by resistance to price increases.
12. A public education program explaining not only the VE program, but also the impact of demand on health services.
13. Seek support from the Administration, Congress, industry and labor for the voluntary program.

14. Insurers and other third-party purchasers should study alternative insurance programs to help contain costs and heighten consumer awareness, as well as ways of reducing their own administrative costs.
15. HEW and other government agencies should study the cost-effectiveness of regulations having a substantial impact on the health care industry, as well as the cost-effectiveness and economic impact of proposed new legislation and regulations.

The above is a much abbreviated form of the original six-page document. It is intended to present only the general thrust. The Board wishes to emphasize that these are only guidelines so far as the individual state programs are concerned. The national goals mentioned are only tentative goals, subject to some uncontrollable influences, such as the overall inflation rate, and each state is asked to establish its own guidelines. It should also be emphasized that many of the recommendations are provisional, pending review by appropriate legal counsel. Goals and objectives, and guidelines and screening criteria are intended to be used by hospitals in assessing their own budgets as guidelines only, pending such review.

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(A-78), page 2*

APPENDIX B

The World Medical Association, Inc. Declaration of Tokyo

Guidelines for Medical Doctors concerning Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment in relation to Detention and Imprisonment.

As adopted by the 29th World Medical Assembly, Tokyo, Japan, October 1975.

Preamble

It is the privilege of the medical doctor to practice medicine in the service of humanity, to preserve and restore bodily and mental health without distinction as to persons, to comfort and to ease the suffering of his or her patients. The utmost respect for human life is to be maintained even under threat, and no use made of any medical knowledge contrary to the laws of humanity.

For the purpose of this Declaration, torture is defined as the deliberate, systematic or wanton infliction of physical or mental suffering by one or more persons acting alone or on the orders of any authority, to force another person to yield information, to make a confession, or for any other reason.

Declaration

1. The doctor shall not countenance, condone or participate in the practice of torture or other forms of cruel, inhuman or degrading procedures, whatever the offense of which the victim of such procedures is suspected, accused or guilty, and whatever the victim's beliefs or motives, and in all situations, including armed conflict and civil strife.
2. The doctor shall not provide any premises, instruments, substances or knowledge to facilitate the practice of torture or other forms of cruel, inhuman or degrading treatment or to diminish the ability of the victim to resist such treatment.
3. The doctor shall not be present during any procedure during which torture or other forms of cruel, inhuman or degrading treatment is used or threatened.
4. A doctor must have complete clinical independence in deciding upon the care of a person for whom he or she is medically responsible. The doctor's fundamental role is to alleviate the distress of his or her fellow men, and no motive whether personal, collective or political shall prevail against this higher purpose.
5. Where a prisoner refuses nourishment and is considered by the doctor as capable of forming an unimpaired and rational judgement concerning the consequences of such a voluntary refusal of nourishment, he or she shall not be fed artificially. The decision as to the capacity of the prisoner to form such a judgement should be confirmed by at least one other independent doctor. The consequences of the refusal of nourishment shall be explained by the doctor to the prisoner.
6. The World Medical Association will support, and should encourage the international community, the national medical associations and fellow doctors to support the doctor and his or her family in the face of threats or reprisals resulting from a refusal to condone the use of torture or other forms of cruel, inhuman or degrading treatment.

Biographical Material in Antebellum Issues of the Nashville Journal of Medicine and Surgery

JAMES X. CORGAN, Ph.D.

Introduction

The *Nashville Journal of Medicine and Surgery* was the most stable and longest lived medical journal published in Tennessee during the antebellum years.¹ While early issues contain many articles of enduring importance,² biographical reports have the clearest historical value. Searching for biographical data in the *Nashville Journal* is challenging because the journal is so rare. A perfect set of all 21 antebellum volumes may not exist. Even partial sets are uncommon. For the historian, it is hard to know what was published.

To aid future scholarship, all Tennessee-oriented biographical announcements that appeared in the 21 antebellum volumes of the *Nashville Journal of Medicine and Surgery* are here indexed.

Index

While editors of the *Nashville Journal* solicited biographical reports on living physicians,³ their efforts were unsuccessful. Each biographical item cited below announced a death.

Entries in this index are brief, their sole function being to facilitate future study. A county of residence and a year of death are normally sufficient data to alert the historian. Cited references and appropriate antebellum newspapers provide further details.

BENEDICT, George W.
Marshall County
Died 1855⁴

CARLOW, Henry
Nashville, Davidson County
Shot while making house call
Died 1860⁵

HAWKINS, Nathan
Greene County
Died 1859⁶

HICKMAN, Edwin
Early Nashville and Memphis resident
Left Tennessee in 1825
Died in Arkansas in 1858⁷

HIGGASSON, Joseph
Somerville, Fayette County
Died 1860⁸
The name Joseph in this brief announcement is evidently an error. The deceased was apparently Josiah Higgason, an early student of the medical topography of West Tennessee.⁹

PORTER, Robert M.¹⁰
Nashville, Davidson County
Died 1856¹¹

ROBARTS, H. R.
Memphis Medical leader
Died in Maury County in 1860¹²

TUCK, William
Memphis, Shelby County
Died 1859¹³

WRIGHT, Ebenezer
Huntingdon, Carroll County
Died 1860¹⁴

YOUNG, J. S.
Nashville, Davidson County
Died 1857¹⁵

Summary and Conclusions

Antebellum issues of the *Nashville Journal of Medicine and Surgery* are a significant source of biographical information. Hopefully this index to the *Nashville Journal* and a companion index to the *Southern Journal of the Medical and Physi-*

Continued on page 594

¹From the Department of Geology, Austin Peay State University, Clarksville, TN 37040.

Biographical Notes from the Southern Journal of the Medical and Physical Sciences

JAMES X. CORGAN, Ph.D.

Introduction

In tracing the history of medicine the basic unit of study is often the biography. While Tennessee's medical historians have long used biographical data, no one has issued an index to any group of published biographies of early Tennessee physicians. Currently each historian starts from scratch, searching the same sources that every prior historian has also searched. Publication of indices to biographical material in a few early medical journals should facilitate future investigations of the history of medicine in Tennessee.

This article provides an index to biographical material in the *Southern Journal of the Medical and Physical Sciences* which first appeared in Nashville in 1853 and ceased publication in Knoxville in 1857.¹ Like most antebellum medical serials, the *Southern Journal* carried an abundance of biographical notes on European and American intellectual leaders who lived outside the area served by the journal. These are of no special interest to Tennessee-oriented historians. The journal also carried simple death notices and more extensive necrologies for Tennessee practitioners. All such announcements are indexed below. In most cases, these reports are the only preserved record of the end of a career.

While many articles in the *Southern Journal* were unsigned, Richard Owen Currey, M.D., was the only functioning editor of the journal during 1855 and later years.² Both historical research and the tenor of editorial comment suggest that during these years Currey was the sole author of unsigned original contributions. Thus, authorship of unsigned obituaries is here attributed to Dr. Currey.

From the Department of Geology, Austin Peay State University, Clarksville, TN 37040.

Index

Entries in this index are brief. Their sole function is to facilitate further study. A county of residence and a year of death are generally sufficient to orient the historian. Cited references and appropriate antebellum newspapers provide further details.

HADDOX, John³

Spring Hill, Maury County

Probably died in 1854

IRWIN, John³

Residence not stated

Died 1855

McNAIRY, Boyd⁴

Nashville, Davidson County

Died 1855

PORTER, Robert Massengill⁵

Nashville, Davidson County

Died 1856

SNEED, George M.⁶

Early physician in Murfreesboro, Rutherford County

Died in Texas in 1857

TATE, Milton⁷

Clinton, Anderson County

Died 1856

YOUNG, John S.⁸

Nashville, Davidson County

Died 1857

Once served Tennessee as Secretary of State

Once practiced in McMinnville

Summary and Conclusions

A reasonably comprehensive search of the literature suggests that Haddox, Irwin, Sneed, Tate, and Young have never been mentioned in an article on the history of medicine or allied fields. Perhaps they were not historically significant people, but perhaps they were. Especially at the

county level, the history of medicine in Tennessee is little studied.



Acknowledgements:

Library expenses and the costs of reproducing and mailing this manuscript were paid by an Austin Peay State University Tower Fund research grant.

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Biographical Material . . .

Continued from page 592

cal Sciences, which follows, will facilitate future historical studies.



Acknowledgements:

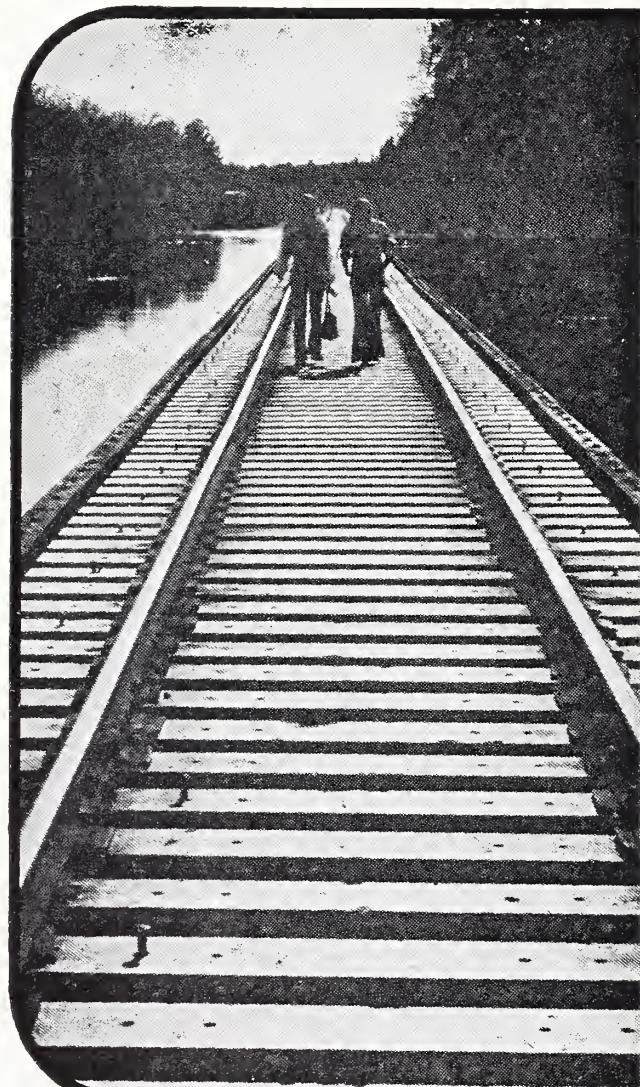
Library expenses and manuscript costs were paid by an Austin Peay State University Tower Fund research grant. S. R. Bruesch, M.D., helped verify the identity of "Joseph Higgason."

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Wilms' Tumor

F. ANTHONY GRECO, M.D., Editor

DR. JOHN LUKENS:

The purpose of today's discussion of Wilms' tumor is twofold. First, Wilms' tumor is the prototype malignancy illustrating the advantages which accrue from a combined, multidisciplinary approach to diagnosis and treatment. Secondly, the fruits of the National Wilms' Tumor Study I (NWTs-I) are now being harvested and, as a result, a number of new data have recently become available. The discussion which follows provides an opportunity to review selected aspects of these data. The case will be presented by Dr. Duncan Campbell.

DR. DUNCAN CAMPBELL:

The patient is a 3½-year-old black female who was referred to Vanderbilt University Hospital 4½ months ago for evaluation of an abdominal mass. The child had always enjoyed apparent good health. Four weeks prior to her admission, the father noted a lump in her abdomen while he was playing with her, but the child continued to be active and had no compromise in her appetite and, as a result, the father's observation was soon forgotten. However, one week prior to admission, she became more irritable, played less, and developed a cough, and two days prior to her referral, the lump was noted by the father to be larger and her naval (previously inverted) had become protuberant and convex.

At the time of her admission, the temperature was 97 F, pulse 136 beats per minute, respiration 28/min, and blood pressure 110/60. The child was in the 60th percentile for height and weight. She was alert, without pallor, and demonstrated no somatic anomalies. There was dullness to percussion at the right base. There was abdominal fullness by inspection caused by a mass filling the right side of the abdomen. The mass measured 9 cm below the right costal margin and extended across the midline in the epigastrium. It was irregular and firm, and its superior aspect could be differentiated from the inferior edge of a normal-feeling liver.

Laboratory evaluation included a hemoglobin of 12.2 gm%, packed cell volume 38%, white blood cells 8,250 with a normal differential (51% neutrophils), and platelets 761,000. A urinalysis was normal. Evaluation of liver function and renal function likewise was normal. A bone marrow aspirate was productive of cellular marrow which showed no evidence of involvement by tumor cells. The remainder of her preoperative diagnostic evaluation was performed by the Department of Radiology. Dr. Coulam will present these findings.

From the Division of Oncology, Vanderbilt University Hospital, Nashville, TN 37232.

DR. CRAIG M. COULAM:

The admission chest roentgenogram showed an infiltrate or atelectasis in the right lower lobe with elevation of the right hemidiaphragm. In addition, there is a small right pleural effusion which is better appreciated with the patient in the right lateral decubitus position. Full lung tomograms uncovered no pulmonary parenchymal lesions. An intravenous pyelogram done on the same day showed a homogeneous density filling the right upper quadrant, and a small portion of the pelvis and collecting system on the right were distorted and displaced inferiorly. It was difficult to say whether the mass arose from within the kidney or whether it lay above the kidney, displacing it inferiorly. The left kidney and pelvis appeared normal.

To better define the mass and its relationship to the kidney, an arteriogram was done. Contrast media injected into the abdominal aorta at about the level of the renal artery and celiac axis showed the aorta displaced slightly to the left, and in addition, the superior mesenteric artery and its branches were displaced. Later views demonstrated stretching of these vessels around a mass extending down to the level of the pelvic brim. A selective injection into the right renal artery illustrated displacement of small vessels arising from the renal artery around a mass in the superior aspect of the right kidney. Neovascularity was responsible for the tortuosity and curling of these vessels, and some were irregularly dilated, others narrow. We concluded that the mass arose from within the right kidney, pushing the gut to the left side of the abdomen.

The next question posed was whether the tumor derived its vascular supply solely from the kidney or whether it was parasitizing other vessels. An injection into the celiac axis demonstrated parasitism of the hepatic artery branches by the tumor. Finally, we sought to define the integrity of the lumen of the inferior vena cava. We felt this was important since Wilms' tumor, our favored preoperative diagnosis, frequently extends into the inferior cava. An injection into the

inferior vena cava showed displacement of the vessel but no evidence of invasion by tumor. The vessel was occluded more proximally, diverting most of the venous return to the azygous system. In summary, the radiographic studies demonstrated a large tumor arising from the right kidney, deriving its blood supply from both the right renal artery and the hepatic artery, and compressing the inferior vena cava.

DR. CAMPBELL:

A few additional studies were done prior to exploratory laparotomy. These included an ultrasound study which demonstrated the displacement of the liver anteriorly and superiorly by the right sided mass, and a liver scan, which showed normal concentration of isotope within the liver and spleen and no filling defect. However, there was a suggestion that the tumor extended over the superior surface of the liver. A bone marrow aspiration showed no evidence of involvement by tumor.

On the third hospital day, the child was taken to the operating room, where the tumor was approached through a thoraco-abdominal incision. A large mass was found to be arising from the upper pole of the right kidney. It extended across the midline and had grown posteriorly and superiorly over the surface of the liver. A portion of the tumor penetrated the right dome of the diaphragm and was associated with a slight amount of right pleural effusion. The entire tumor mass was removed en bloc, and the right hemidiaphragm was reconstructed. The left kidney, which appeared normal radiographically, was found to contain four tumor masses over its surface, and their location obviated removal by subtotal resection.

In summary, this is a child with a bilateral tumor intrinsic to the kidneys. All gross disease was removed from the right side of the abdomen, but there was residual disease within the left kidney.

Dr. Richard Johnson will present the pathologic findings.

DR. RICHARD JOHNSON:

The advances which have been made in the treatment of Wilms' tumor stress the importance of a multidisciplinary approach to all cancer patients. In general a thorough understanding of the biology and natural history of a tumor is essential for the planning of therapy. Results are now available from the NWTs-I which provide additional information on the biology of this

tumor. Certain histologic patterns appear to have prognostic significance which will be discussed later.

Although it is usually clinically suspected, confirmation of a diagnosis of Wilms' tumor rests on the macroscopic and histologic examination of the tumor in the surgical pathology laboratory. The differential diagnosis of renal neoplasms of infancy includes Wilms' tumor (nephroblastoma), intrarenal neuroblastoma, which rarely occurs, and a tumor commonly known as congenital mesoblastic nephroma, which generally behaves in a benign fashion.

Wilms' tumor can present a variety of macroscopic appearances. Very small tumors tend to be ill defined and hemorrhagic. These small tumors can invade the renal pelvis leading to hematuria as a presenting symptom. The opposite end of the spectrum is represented by very large tumors 15 to 20 cm in diameter, often weighing in excess of 1,200 gm. These large tumors present usually as an abdominal mass. Other Wilms' tumors exhibit extensive cystic degeneration resulting from extensive necrosis which resembles a multilocular cyst of the kidney. Pronounced lobulation is a feature of some tumors; it is not unusual to find dysplastic changes in some kidneys giving rise to Wilms' tumors.

The classic Wilms' tumor consists of a large rounded mass which replaces much of the kidney in which it arises. A pseudocapsule is usually present, consisting of fibrous tissue and compressed normal kidney. The cut surface usually presents a homogeneous grayish-pink to tan appearance. Small areas of necrosis and hemorrhage are not uncommon.

Since the tumor arises in the renal blastema, the primitive cells destined to form all components of the kidney, histological examination of Wilms' tumors shows considerable variation. The blastema may be monomorphous or it may show epithelial differentiation in the form of tubules. Sometimes both of these elements are present and intermixed. Mesenchymal tissue is another component of the tumor which shows grades of differentiation into connective tissue and muscle varying in malignant potential.

Prognostic factors for patients with Wilms' tumors without metastases at the time of diagnosis have been determined by the NWTs-I.¹ Anaplastic or sarcomatous histology, a tumor weight in excess of 250 gm and positive regional lymph nodes are predictors of mortality. Beckwith² has

rather loosely used the term “anaplasia” to refer to tumors with unfavorable histology. He has defined anaplasia as being present when all three of the following criteria are observed: (1) marked cellular enlargement and atypia, with nuclear diameters at least three times those of adjacent unaltered cells of the same type, (2) obvious nuclear hyperchromatism, and (3) abnormal mitotic figures. Anaplasia may be observed in any or all of the three major cell components in Wilms’ tumor—blastema, epithelium or stroma. It should be stressed that anaplasia as defined by Beckwith is very easily diagnosed and is best diagnosed under low power magnification. Even the focal presence of anaplasia serves as a predictor of relapse and mortality. Anaplasia is termed focal when it is observed in less than 10% of high power fields examined.

The predominantly monophasic sarcomatous variants of Wilms’ tumor which carry an unfavorable prognosis include a rhabdomyosarcomatoid pattern, a clear cell pattern and a group of tumors which has some resemblance to osteosarcoma. These sarcomatous variants tend to affect younger children. In children whose death was attributable to tumor, eight of ten deaths were in children under 2 years of age at the time of diagnosis.

In our patient, extensive sampling of the surgical specimen did not reveal anaplasia or unfavorable sarcomatous variants of Wilms’ tumor. Histologically, the right kidney was composed of predominantly blastema and stroma with rare epithelial elements. The contralateral kidney was biopsied, revealing a tumor showing well-formed epithelial tubules surrounded by stroma.

DR. LUKENS:

Since therapy is based in large part on the anticipated course or aggressiveness of a tumor, it would be appropriate to first review our current understanding of prognostic factors as they relate to the case presented. The NWTS-I has permitted the first large scale multivariant statistical analysis of data from a large group of children.¹ From this type of analysis, five variables have surfaced as having clear prognostic significance (Table 1).

TABLE 1
POOR PROGNOSTIC FACTORS²

Age over 2 years
Tumor over 250 gm
Capsular penetration
Regional node involvement
Anaplasia or sarcoma histology

TABLE 2
FACTORS HAVING LITTLE OR NO PROGNOSTIC SIGNIFICANCE²

Race, sex
Laterality
Operative spillage
Intrarenal vascular invasion
Tumor thrombus (renal vein or inferior vena cava)

As suspected for some period of time, age was a significant factor, children 2 years of age or younger faring better than those over 2 years of age. In addition, patients having a tumor plus kidney weighing less than 250 gm had a better outlook than those with larger specimens. The normal kidney weight for a 3-year-old is approximately 100 gm. It did not necessarily follow, however, that all large tumors portended an unfavorable outlook. There were a number of children in the study with tumors weighing in excess of 1 kg who did well. Capsular penetration and involvement of regional lymph nodes, especially occurring with unfavorable histologic types, were associated with a poor prognosis for relapse.

Of greatest prognostic significance was the histologic grading of tumors. A high incidence of relapse was observed in children having anaplasia or sarcomatous histology. These unfavorable histologic features, although seen in only 18% of children in the study, were responsible for some 80% of relapses. Other characteristics of Wilms’ tumor (Table 2), previously thought to have prognostic significance, were found to have little if any predictive value over and above the features already mentioned. These included the race and sex of patients, laterality (right vs. left), operative spillage of tumor, direct regional extension, intrarenal vascular invasion, and tumor thrombi in the renal veins or inferior vena cava.

On the basis of this type of analysis, it is possible to draw up risk factors for various situations (Fig. 1). Included in this figure are risk factors

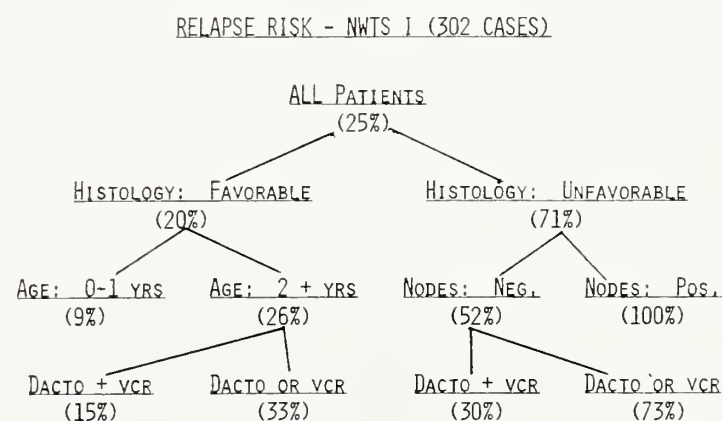


Figure 1. Relapse risk factors for clinical observations and tumor histology.

for clinical observations and tumor histology. The risk for relapse ranges from 9% for infants less than 1 year of age having tumors with favorable histologic features to 100% for tumors having unfavorable histology with regional node involvement. In addition, the advantages of double agent chemotherapy is depicted. Those children receiving both vincristine and dactinomycin fared better than those receiving either one or the other agent. In the child presented today, the estimated risk of relapse is 15% (favorable histology, age in excess of 2 years, treatment with two drugs).

These data, however, do not take into consideration the bilaterality of our patient's disease. Although children with bilateral Wilms' tumor were not eligible for the therapeutic questions posed by the NWTs-I, information regarding this group of patients was collected and has recently been subjected to analysis. I have asked Dr. Roloff to review information from the NWTs-I concerning bilateral disease. In particular, he will comment on the prognostic implications of bilateral involvement.

DR. JAMES ROLOFF:

The NWTs-I did not include bilateral Wilms' tumor because it was considered such a complex disease. It was unclear whether the process represented metastatic disease to the opposite kidney or the expression of multiple primaries. Subsequently, the Cooperative Group Committee designed the study to tabulate data on stage V patients for a retrospective evaluation.³

Table 3 compares features of bilateral Wilms' tumor with unilateral disease. Of the 606 patients available for review, there were 33 (5.4%) that presented with bilateral involvement. The male to female ratio was virtually comparable between these two groups, but noteworthy was the fact that the age at presentation was younger: the mean age of patients with unilateral disease was 44 months while for bilateral disease it was 15 months. This age difference may hold a clue to the etiological factors involved in Wilms' tumor, as will be discussed below.

The preoperative evaluation of the child presenting with Wilms' tumor may not help recognize the child with bilateral disease. Physical examination alone identified less than 33% of patients ultimately proven to have bilateral involvement. An IVP increased the yield to 64%, leaving more than a third of children with bilateral disease going to the operating room without the correct diagnosis. Five children of the 33

TABLE 3
FEATURES OF UNILATERAL VS. BILATERAL WILMS' TUMOR

	Unilateral	Bilateral
Incidence	94.6%	5.4%
Sex (M:F)	1.2	0.8
Age:		
<1 yr	13%	12%
1-2 yrs	18%	39%
>2 yrs	69%	39%
MEAN AGE	44 mo	15 mo

had an arteriogram. Four of these had evidence for tumor involvement of the opposite side. It might be concluded that this procedure has utility in identifying bilateral disease; however, the fifth child as well as the subject of the conference had arteriograms showing no evidence of abnormality of the contralateral kidney. Subsequently, one cannot conclude that a patient has only unilateral disease until the surgeon has examined the other kidney in situ.

Initially, the study committee was pessimistic about stage V patients. Metastases or multiple primaries were thought to imply a fairly aggressive, potentially resistant tumor. Surprisingly, review of these patients documented an 87% overall survival in excess of two years. Upon close examination of the approaches taken with these children, no real pattern emerged. Complete tumor removal was performed in seven patients, i.e., removal of the predominantly involved kidney as well as resection of all visible tumor in the other kidney. All seven children survived. An additional child had a bilateral nephrectomy and transplantation. However, this was late in his course, and he did not survive. Incomplete resection was the more common result in the remainder of the stage V patients. Yet, 86% of them survived more than two years.

One may conclude that residual tumor does not preclude successful therapy in this particular setting. Tumor size may be important. Children with residual tumor greater than 5 cm in diameter had the greatest incidence of recurrence and worst mortality. The role of radiation therapy in children with bilateral disease was difficult to characterize. It appeared that 1,000 to 2,000 rads would prove effective in local control, while chemotherapy plus radiation therapy was useful for unresponsive tumors. Chemotherapy using dactinomycin or vincristine or the combination of the two paralleled the experience in unilateral disease: two drugs seemed to be more effective than one.

In summary, bilateral disease is commonly missed in the preoperative workup, strongly supporting the surgeon's inspecting and palpating the opposite kidney at the time of surgery. Dactinomycin and vincristine are effective in combination, while radiation therapy may be best reserved for local control or use in resistant tumors. "Second-look" operations were considered potentially useful for eventual resection of total tumor burden, but the fact these children survived despite residual tumor argues less strongly in favor of this approach.

As to the nature of etiologic factors in bilateral Wilms' tumor, the "two-hit hypothesis" proposed by Knudson⁴ may be applicable. Knudson suggested that oncogenesis may result from two sequential mutational changes or "hits." The first hit can be either prezygotic or postzygotic while the second is always postzygotic. If the first hit involves germinal tissue, the tumor may become "hereditary," i.e., passed longitudinally from generation to generation. In contrast, if the first hit involves a somatic tissue, the tumor would present in a sporadic, nonhereditary fashion. Using a mathematical model and applying it to retinoblastoma, a tumor known for its hereditary nature, Knudson demonstrated that hereditary tumors present as multiple or bilateral disease, that there may be a familial incidence, and that the malignancy occurs at an earlier age, since the individual has inherited a malignant predisposition. In contrast nonhereditary tumors should be unilateral and sporadic because statistically two hits would likely occur in only one site, and there would be no familial occurrence. Also, it should occur in an older age group allowing time for both hits to occur.

Knudson has attempted to apply this hypothesis to other embryonic tumors including Wilms' tumor. It appears from some preliminary work that this may be valid. Bilateral Wilms' tumor does occur in an earlier age group. In the few cases of familial Wilms' tumor, there is a much higher frequency (21%) of bilateral disease, than in nonfamilial disease (5.4%). The maternal age at the time of delivery of the child who eventually develops bilateral disease is older than of the child ultimately developing unilateral disease, suggesting that the maternal germinal tissues may have had longer to be exposed to the first hit. These data are limited and inconclusive, but suggest an interesting concept for any bilateral or multiple tumor.

It will be important to follow these children

TABLE 4
TREATMENT OF WILMS' TUMOR

Year	Treatment	Cure Rate (%)
1932-40	Surgery	32
1940-56	Surgery + RT	40
1956-66	Surgery + RT + CT	81
1969-73	NWTS-I	=86
1973-	NWTS-II	

since they may have an increased risk of other tumors. Likewise, if these children with bilateral disease survive long enough to parent a second generation, the longitudinal transmission of a malignant predisposition should be tested. Their children may have an increased incidence of multiple tumors, as well.

DR. LUKENS:

Against this background, I should like to discuss the therapy of Wilms' tumor. A historical perspective may be useful in understanding the rationale for the management of the patient under consideration (Table 4). Dr. Ladd, from the Children's Hospital in Boston, was the first of surgeons to tackle Wilms' tumor. Prior to 1932, Wilms' tumor was almost invariably a fatal disease. Paying special attention to ligation of the renal vessels before manipulation and resection of the tumor, Dr. Ladd was successful in salvaging approximately one third of children with this disease. Beginning in 1940, Dr. D'Angio, the radiation therapist working with Dr. Ladd, began the practice of delivering radiation to the tumor bed postoperatively. There was perhaps a modest increase in overall survival to about 40%. Those children who presented with metastatic disease invariably died. In general, those who survived were children with well-encapsulated, surgically resectable tumors.

Beginning in the late 1940s, Dr. Sidney Farber, a pathologist in the same institution, began to screen chemotherapeutic agents for possible activity against this tumor. It was not until 1954 that dactinomycin was first made available to him. Before the close of that year, it was apparent that this drug had potent cancerocidal activity. This observation was soon to be confirmed by other institutions around the world. Dr. D'Angio made the observation that children receiving dactinomycin were more sensitive to the tissue effects of radiation therapy. For example, skin erythema was seen at doses of radiation less than those generally required to produce skin changes. He reasoned that dactinomycin might potentiate the effect of radiation, not only on normal tissues, but

also on tumor. Prior to that time, the amount of radiation necessary to sterilize pulmonary metastases was such as to produce irreparable radiation pneumonitis or fibrosis. Consequently, both therapeutic modalities were subsequently used for children with metastatic disease. By the early 1960s, it was apparent that this approach was effective in permanently reversing growth of metastatic tumor in at least some individuals—a truly exciting observation.

The next step in the history of the treatment of this disease was the incorporation of a chemotherapeutic agent known to be effective against metastatic disease into the initial therapy. This step was based on the hypothesis that chemotherapy might be more effective if delivered at a time when metastases were poorly established and microscopic in size. The effectiveness of this combined approach to therapy was summarized by Dr. Farber in his Lasker Award address in 1966.⁵ His data were based on a relatively small number of patients treated at a single institution. The overall cure rate for this group of patients (defined as disease-free survival for two years) was an astounding 81%, a figure which again was confirmed by other institutions in the years to follow.

Subsequent to this retrospective analysis at the Children's Hospital in Boston, other chemotherapeutic agents having activity against Wilms' tumor were identified. Of particular significance was vincristine. In 1969 the first national effort to utilize patient material from across the country was launched. Between 1969 and 1973 approximately 600 children with Wilms' tumor were registered with the NWTS-I. The overall survival in this group is of the order of 86%.⁶ The second National Wilms' Tumor Study (NWTS-II) is currently in progress.

The questions posed by NWTS-I dealt with the need for postoperative radiation therapy and with the relative merits of different chemotherapeutic regimens. Children with tumors confined to the kidney and totally resected (group I) were randomized postoperatively into two groups, one receiving postoperative radiation therapy to the flank and the other not. All group I children received postoperative courses of dactinomycin for 15 months. All patients with more advanced stages of Wilms' tumor but without metastatic disease (groups II and III) received postoperative radiation therapy and then were divided among three chemotherapy regimens: dactinomycin alone, vincristine alone, and combined dactinomy-

cin and vincristine. It was found that children under 2 years of age in group I did not require postoperative radiation therapy. In older children the nonirradiated group had an increased number of flank relapses and infradiaphragmatic recurrent disease. For group II and III children, combined double agent chemotherapy was more effective in preventing relapse than either dactinomycin or vincristine alone.⁶

In the current Wilms' tumor study, a further reduction in therapy for group I patients is being evaluated. Group I patients are randomized to receive either 6 or 15 months of chemotherapy (dactinomycin plus vincristine) as their only postoperative therapy. Currently, it appears that those children treated for six months are faring as well as those treated for the longer period. For more advanced disease, the relative value of a two- and a three-drug regimen (the third drug being adriamycin) is under evaluation. An addendum to the NWTS-II will seek to define optimal doses of radiation therapy for patients having more advanced stages of disease.

Our patient was started on both dactinomycin and vincristine in the immediate postoperative period. It is our plan to continue both drugs for a total of 15 months. In addition, she received radiation therapy both to the tumor bed on the right as well as to residual disease in the left kidney. I have asked Dr. Stroup to comment on considerations basic to decisions regarding the radiation doses which this child received.

DR. STEVEN STROUP:

The NWTS group has been carrying out randomized studies on the treatment of Wilms' tumor for a number of years. The role of radiation in the treatment of Wilms' tumors has been studied and certain observations have been made. In group I patients in the NWTS-I, only 1 of 91 cases had flank recurrence and that patient had the sarcomatous type histology. Multiple sites of relapse were noted at the same time that flank recurrence was identified. It is felt from those data that irradiation plays no role in the group I patients, which is why radiation is not included in NWTS-II for group I patients. If you look at what radiation has helped, there is a statistical difference in survival for groups II, III and IV. It looks as though radiation has been helpful in those patients and there is considerable resistance to dropping radiation or even randomizing no radiation plus some radiation in those groups of patients.

A variety of doses has been delivered in dif-

ferent institutions because there was a range allowed in the protocol. That information has been studied in an effort to try to see if there were any dosages that were significantly better than others. It seems that anything above about 1,500 rads is sufficient to control the tumor in that area as long as chemotherapy is used concomitantly. Earlier data suggested higher doses were required to control local disease but most of those data were pre-effective chemotherapy era.) With lower doses of irradiation less complications are seen. In the NWTs-II it has been elected to randomize from 1,500 to 2,000 rads to see at what dose levels we can achieve comparable local control rates.

Radiation has been markedly helpful in clearing lung metastases and we are seeing about a 45% cure rate in people who present with lung metastases who received whole lung irradiation plus effective chemotherapy. Some people have tried to use prophylactic whole lung irradiation but this does not seem to have a better control rate than groups of patients treated after the fact.

Once a decision has been made to use irradiation in the treatment of a particular patient, one must decide when it should be used. Should it be used on the day of surgery or immediately following surgery, or should chemotherapy be given first and then use irradiation within six weeks? It seems as though control rates are equally good as long as the irradiation is started within a few weeks of surgery. Some institutions have said one had to take patients from the operating room right to radiation. Some have even tried to irradiate them in the operating room when they had the capacity to do that. Most of us have felt that was not necessary.

Field size was studied to see if there was a risk of geographic miss. No correlation of control to field size could be made. Dose ranges varying from 1,500 rads, 2,500 rads, 3,000 rads, and 4,000 rads were studied and no significant differences could be seen. Age of the patient did not seem to affect dose required to control tumor. In other words it was not necessary to treat an older patient with a higher dose as previously practiced.

In the case under discussion, a bilateral Wilms' tumor was noted. There is no consensus as to how these cases should be treated, but there is some suggestion from the NWTs group data on how these patients can best be treated. There were 33 bilateral Wilms' tumors noted at time of initial surgery of 606 patients who were studied in the group I study. There were an additional 20

patients of this group of 606 who subsequently had the diagnosis of bilaterality of their disease. If one looks at how these were treated, five patients were treated with a nephrectomy and heminephrectomy at the same time, others had nephrectomy and biopsy only of the opposite side, 11 patients had biopsy only and had chemotherapy, radiation and subsequent resection. There was no pattern that could say which approach was the best, so one can't state from the current data a best method of management, be it resect early, resect late or just what. All patients received drugs and most received combination chemotherapy. There was a wide variety of radiation given and a wide variety in the method of giving it—some preoperatively, some postoperatively, with dosages varying considerably.

How should we then treat? We are guided somewhat by the knowledge of tolerance of the kidney. In an adult, 2,500 to 3,000 rads will induce a 10% incidence of radiation nephritis. One certainly would like to stay below that, particularly if the child only has one persisting kidney. One has to consider that 87% of these children survived with the randomized treatment that had been given. Ten percent of the deaths were due to treatment. These were in children who had bilateral nephrectomy and developed overwhelming infections after attempts were made at transplants and immunosuppressive measures were taken. So one has to be careful not to do anything that is going to increase morbidity or mortality to a significant degree. Most of us feel that one should remove the worst kidney and treat, probably initially, with systemic chemotherapy to try to reduce the volume of disease in the remaining kidney. Depending on the residual tumor volume and location of tumor, one may consider reoperating to remove that residual by partial resection. In our case, the surgeons felt they could not resect residual tumor from persisting kidney, so we elected to treat it with systemic chemotherapy and irradiation.

There were two problems here that had to be considered in developing radiation plans. One was the extensiveness of her disease in the right posterior gutter and the other was the irresectable disease present in her left kidney. We elected to treat the entire volume of her abdomen down to the iliac crest including the diaphragm, remembering that she had diaphragmatic involvement on the right side. We treated that volume initially to 900 rads and then boosted the dose to the right hemiabdomen and renal bed, taking that

to 2,400 rads. This was fairly well tolerated except for some anorexia. She was receiving concomitant drugs and she was recuperating from surgery during irradiation so she was being treated quite vigorously.

I personally feel that one should individualize treatment of bilateral Wilms' tumor at this time. We like to debulk these patients. When no gross disease is left in the abdomen, patients have a much better prognosis than if bulky disease is known to be left behind. I think that all of us who work in this field would concur in that statement so that if possible we would like to resect even the residual disease that's in the lesser of the two involved kidneys. We use irradiation in the judicious manner in an effort to improve the local control rate over surgery alone, relying on systemic chemotherapy to help us reduce that population of cells along with cells that may be circulating at time of initial treatment. We irradiate patients with Wilms' tumor also to deal with liver as well as pulmonary involvement.

Pulmonary metastases are hematogenous and usually involve more than one focus. Because of this we prefer to treat both lung fields initially rather than spot treat metastases as they appear. There are data from Children's Memorial in Chicago that one's control rates are better when whole lungs are treated than if spot treatment is utilized. There was some discussion two weeks ago about the efficacy of local resection of pulmonary metastasis. I personally feel that resection should be used only in those patients who have persistent masses that have not responded to irradiation and chemotherapy. One exception to this statement would be in the case of a young woman with a single focus of tumor in the lung that had not changed over a three-month period. Resection should be considered in that case because if irradiation is utilized hypoplasia of breasts may be seen.

As is apparent, chemotherapy, surgery and irradiation have a role in the treatment of Wilms' tumor but this continues to be a changing role with better results and fewer side effects.

DR. LUKENS:

I might conclude by projecting current survival statistics for children entered on National Wilms' Tumor Study I. The disease-free survival for all children entered on the study is plotted in Figure 2. The figures in parentheses refer to numbers of patients at each point in follow-up. As can be seen, the disease-free survival approaches 80%. What happens to those children who develop

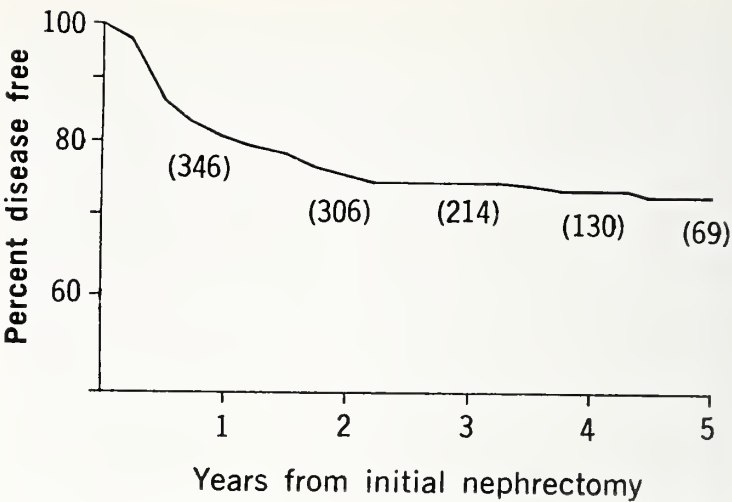


Figure 2. Disease-free survival statistics for all children entered on the NWTS I. Figures in parentheses refer to numbers of patients at each point in follow-up.

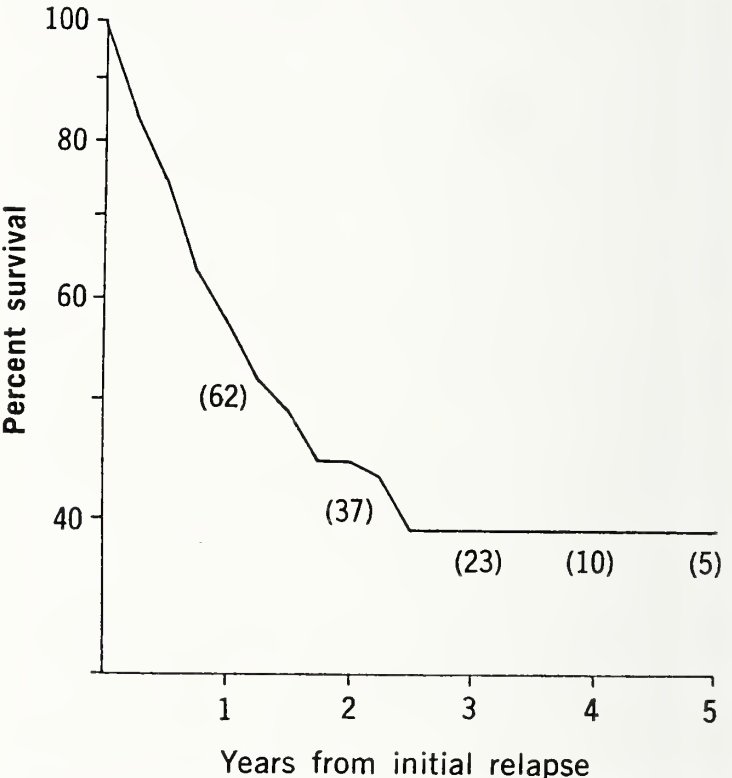


Figure 3. Apparent cure rate for children who either presented with metastatic disease or developed metastases following initiation of treatment.

recurrent disease? Figure 3 indicates the apparent cure rate for children who either presented with metastatic disease or developed metastases following initiation of treatment. The apparent cure rate is approximately 40%.

I should like to thank the several members of the staff who have participated in this discussion.

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Pancreatitis — Does the Patient Have It?

JOSEPH J. SANNELLA, M.D.

Elevations of serum amylase occur in only 75% to 80% of patients with pancreatitis. There are at least two major reasons for "false" negative results.

The first is brief or minimal disease. In these instances, examination of the urine for amylase content may help to confirm the diagnosis, since the rate of release of amylase into the circulation may be insufficient to produce significant serum elevations but the 24-hour urine concentration will be increased. If one-hour urines are used for amylase excretion rates, it is suggested that more than one sampling be done since there can be considerable variation from hour to hour.

The second major cause of "normoamylasemia" in pancreatitis is the presence of hyperlipemia. Actually, both the urine and serum amylase *content* is increased, but due to the presence of inhibitors, the amylase *activity* appears normal. When such specimens are serially diluted, the effects of the inhibitors are lessened and the true extent of the amylase increase is unmasked. The hyperlipemia does not appear to be the direct cause of activity suppression. Removal of the lipids by ultracentrifugation does not alter results. The inhibitors have not as yet been identified.

Amylase activity is found in extracts of many organs besides pancreas and salivary gland. For example, some is found in the oviducts. Consequently, numerous diseases are associated with elevations of serum amylase activity. The excellent review by Salt and Schenker¹ provides more details along with an extensive bibliography. Some of the more important intra-abdominal nonpancreatic causes of hyperamylasemia they have listed are biliary tract disease, perforated peptic ulcer, intestinal obstruction, ruptured ectopic pregnancy, mesenteric infarction, afferent loop syndrome, peritonitis, appendicitis and aortic aneurysm with dissection. Extra-abdominal disorders such as diabetic ketoacidosis, pneumonia,

cerebral trauma, burns or traumatic shock, prostatic disease, pregnancy, renal transplantation, renal insufficiency, maxillofacial surgery, salivary gland disorders, pregnancy, macroamylasemia, several drugs (steroids, thiazides, tetracycline, oral contraceptives, azathioprine, ethacrinic acid and chlorthalidone) and various tumors can all produce hyperamylasemia.

It is apparent from all of the foregoing that ruling pancreatitis in or out by performing a single serum assay is highly likely to cause error. Yet this is still a common practice. Neither the sensitivity nor the specificity of the test are sufficiently high to warrant such reliance. Combining serum and urine assays improves both sensitivity and specificity but it appears that the single best laboratory test for establishing or excluding the diagnosis of pancreatitis with reasonable certainty is the *amylase/creatinine clearance ratio*. A very important advantage of this test is that timed urine specimens are not required, as can be appreciated by examining the formulae² in Figure 1.

$$\frac{\text{Amylase Clearance}}{\text{Creatinine Clearance}} = \frac{\frac{\text{amylase (U)}}{\text{amylase (S)}} \times \text{timed U volume}}{\frac{\text{creatinine (U)}}{\text{creatinine (S)}} \times \text{timed U volume}}$$

Timed urine volumes cancel out and the transposed formula expressed as percent becomes,

$$\frac{\text{Amylase/Creatinine Clearance Ratio (\%)}}{\frac{\text{amylase (U)}}{\text{amylase (S)}} \times \frac{\text{creatinine (S)}}{\text{creatinine (U)}} \times 100}$$

The normal range is 1% to 4%. One must be careful that the amylase units in both serum and urine are identical. The same is true for the two creatinine determinations. Simultaneous urine and blood collection is necessary.

Figure 1. Amylase/creatinine clearance ratio test. U=urine; S=serum.

When pancreatitis is accompanied by hyperlipemia, the suppression of amylase activity in serum and urine is proportional; therefore, the clearance ratio is not affected.³ Lesser and Warshaw⁴ have also reported that choledocholithiasis

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From Clinical Laboratories of Nashville, 5 Park Plaza, Nashville, TN 37203.

W. BARTON CAMPBELL, M.D.

A 43-year-old man was admitted to St. Thomas Hospital for cardiovascular evaluation. Three months previously he had the onset of subxyphoid discomfort which was relieved by antacids. One month prior to admission he awakened with severe substernal pain lasting for approximately an hour, which recurred the next morning and radiated into the neck and both arms, with associated nausea and vomiting. He was hospitalized elsewhere for one week. It was noted that his CPK and LDH were elevated and he had changes on the electrocardiogram which were felt to suggest myocardial infarction. Upper GI series and gallbladder study were normal. He entered St. Thomas Hospital for coronary cineangiography.

Physical examination at the time of admission disclosed an obese, affable man who looked to be older than his stated age of 43. He weighed 268 pounds with a height of 5' 11". Blood pressure was 150/90. The examination was otherwise within normal limits. A chest x-ray disclosed no abnormalities. An electrocardiogram was obtained (Fig. 1).

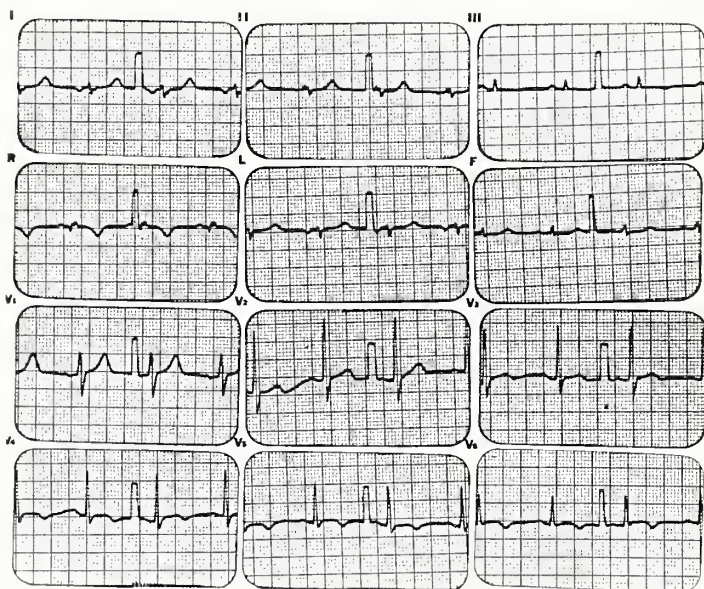


Figure 1

Discussion

The rhythm is regular at 75 per minute, and the PR interval is normal at 0.18 seconds. The

striking finding on this electrocardiogram is the inverted P wave in standard lead I. Atrial depolarization normally occurs from right to left. Therefore, the P waves in standard lead I should be upright as the electrical forces move toward the positive pole of lead I (on the left arm).

A common cause of P wave inversion in lead I is dextrocardia. If dextrocardia is present the QRS voltage will diminish across the left precordium. In addition, as the electrodes are moved progressively away from the heart the QRS morphology will not change significantly from that in V₁. In this electrocardiogram the R wave and overall voltage wave in V₂ are more prominent than those in V₁. Also, the S wave noted in V₁ is progressively lost in the lateral precordial leads. These observations exclude dextrocardia as an explanation for the inverted P waves in standard lead I.

An ectopic atrial pacemaker could result in left to right depolarization. It is rare for this to occur without significant deformity of the P wave, however. The most common cause of P inversion in standard lead I is right and left arm lead reversal by the electrocardiographic technician. Arm lead reversal will result in a mirror image standard lead I. Therefore, the initial R wave in standard lead I would actually represent a Q wave. This suggests that the early QRS forces are actually directed to the right. Similarly the small R wave in aVL in this tracing represents a Q wave. The T waves in I and aVL are actually going toward the right and will be deeply inverted in a properly run tracing. Note that there are nonspecific ST-T wave changes with T inversion in V₄, V₅ and V₆.

This tracing (Fig. 1) is representative of right-left arm lead reversal in the presence of a high lateral infarction. The ST-T wave changes suggest that the infarction is of a relatively recent vintage or possibly associated with ventricular aneurysm.

From the Department of Cardiology, St. Thomas Hospital, Box 380, Nashville, TN 37202.

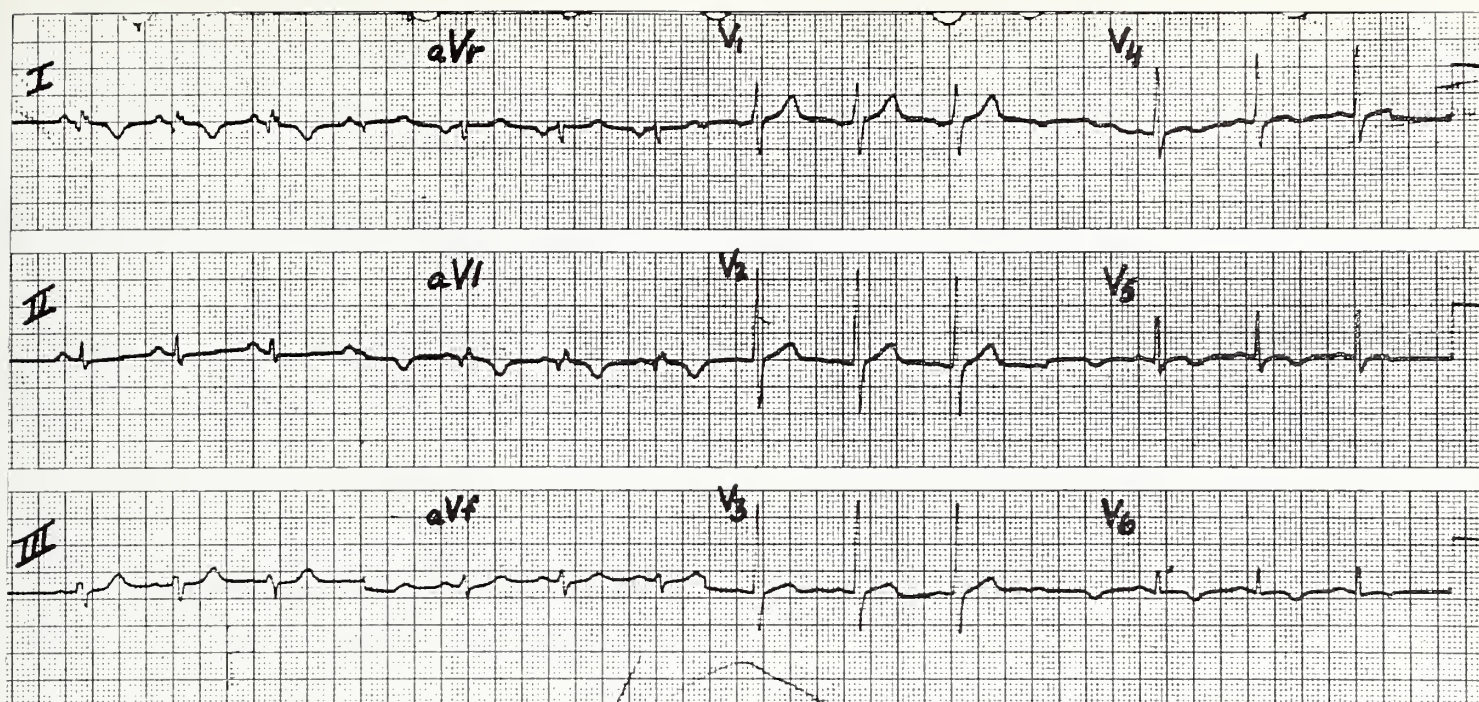


Figure 2

Cardiac catheterization and selective cineangiography were carried out. The patient was found to have complete occlusion of the proximal circumflex coronary artery. There was severe left ventricular dysfunction with lateral and apical akinesis.

A repeat electrocardiogram was obtained (Fig. 2) showing the tracing with correct lead place-

ment. Note that the P waves are now appropriately upright in standard lead I and AVL and inverted in AVR. The Q waves with deeply inverted T waves in I and AVL are pathognomonic of high lateral infarction.

Conclusion: Right-left arm lead reversal. High lateral myocardial infarction.

Laboratory Medicine . . .

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not associated with pancreatitis will have a normal clearance ratio in spite of hyperamylasemia.

It is unlikely that the amylase/creatinine clearance ratio is completely specific for pancreatitis but it does represent an important refinement in the laboratory diagnosis of a disease that too often is enigmatic.

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CAT Scan of the Month

STEPHEN GAMMILL, M.D.; ROY PAGE, M.D.; and LING LEE, M.D.

A 61-year-old woman was admitted to the hospital complaining of an inability to perform acts of dexterity. CAT scan of the brain showed lesions in the right frontal and left occipital lobes that were interpreted as metastatic deposits. We then began the search for the primary tumor. The following roentgenographic studies failed to disclose a primary tumor: chest, spine, abdominal sonography, nuclear bone and liver scans, barium enema, excretory urogram, upper gastrointestinal series and xeromammograms.

Figures 1 and 2 are samples of CAT scan of the abdomen. Please examine them and see if you can detect an abnormality (Fig. 2 was made caudal to Fig. 1).

Discussion

The stomach may be seen in the left upper quadrant. It has been filled with contrast material. Also, please notice that neither lobe of the liver contains filling defects and that the aorta is visible in the midline anterior to the spine. It contains a calcified plaque in Figure 2. The inferior vena cava lies adjacent to and in contact with the liver to the right of the midline. In Figure 1 enlarged adrenals are represented



Figure 1

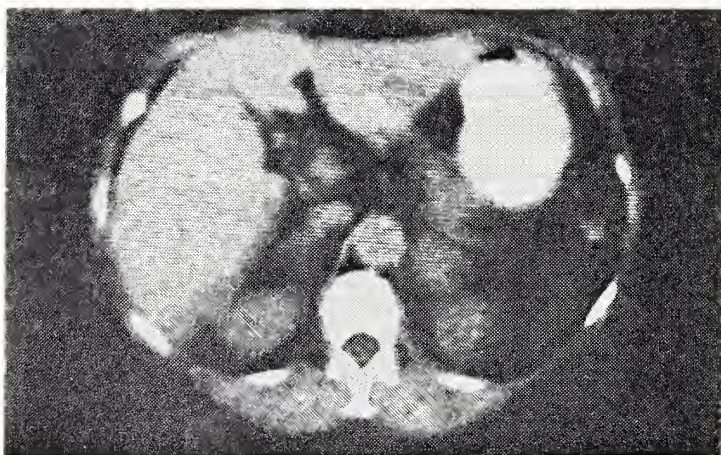


Figure 2

From the Department of Radiology, Baptist Memorial Hospital, 899 Madison Ave., Memphis, TN 38146.

by lobular opacities located on either side of the aorta. In Figure 2, the superior poles of the kidneys appear posterior to the adrenal glands.

We then questioned whether we were dealing with bilateral adrenal hyperplasia or metastatic tumor involving both adrenal glands. We actually favored adrenal hyperplasia since the glands were symmetrically enlarged. To solve this dilemma, we decided to biopsy one of the adrenal glands.

Sixty milliliters of contrast material was injected intravenously and the patient was placed in the prone position. Using the opacified left kidney as a reference point, a Lee needle was inserted into the left adrenal gland under fluoroscopic monitoring. Tissue was then aspirated and sent to the laboratory for histologic examination. The diagnosis of undifferentiated carcinoma, most likely pulmonary in origin, was returned.

Bronchoscopy was then performed. Bronchial washings from the right lung contained large undifferentiated carcinomatous cells. The patient was treated with radiation to her right lung and with chemotherapy. The final diagnosis was large cell undifferentiated carcinoma of the right lung (nondetectable on chest roentgenogram) with metastases to the brain and adrenal glands.

With the advent of computerized tomography, an excellent modality for evaluation of the adrenal glands was born. Among the diagnostic modalities which include ultrasonography, arteriography, venography and excretory urography, it offers the most accurate appraisal. It also provides an opportunity to evaluate the remaining abdominal organs such as liver, lymph nodes, and kidneys when searching for a primary tumor once a metastasis has been discovered extra-abdominally. Although CAT scanning may not provide a definitive diagnosis as was the case with the patient in this presentation, it usually readily serves the most important function that any radiographic study hopefully serves: the differentiation between normal and abnormal.

Once we had established that the adrenal glands were abnormal, we were able to take the next step toward arriving at a definitive diagnosis, in this case a percutaneous needle biopsy, a reasonably simple, safe and accurate procedure.

Answer: Enlargement of both adrenal glands.



Tennessee Perinatal Care System

In 1974, the Tennessee Legislature passed enabling legislation which established a State Newborn Advisory Committee and which began the efforts toward the development of a program for regionalized newborn services. These efforts included the development of systems of care, consultation mechanics, educational programs for nurses and physicians, and systems for high-risk newborn transport.

E. Conrad Shackelford, Jr., M.D., chairman of the Advisory Committee, appointed a subcommittee on regionalization, care levels, staffing, and facilities which proposed that four Perinatal Regions be established in Tennessee: the West, Middle, East, and Southeast Perinatal Regions. This subcommittee also undertook the responsibility to develop guidelines for the Tennessee Perinatal Care System.

Funds to implement the High-Risk Newborn Program were appropriated in 1976. The Tennessee Legislature, in 1977, expanded the legislation to include high-risk obstetrical services and increased the membership of the Advisory Committee which became the State Perinatal Advisory Committee. The Tennessee Department of Public Health and this committee began the development of a regionalized system of perinatal care this fiscal year.

The Advisory Committee is composed of 13 members appointed by the commissioner of Public Health for four-year terms. Members include representatives from obstetrical and newborn centers, medical schools, and public health agencies; hospital administrators; medical specialists in obstetrical and newborn conditions; family physicians; obstetrical and neonatal intensive care nurses, and the general public.

The members are Lana Beavers, M.D., Shelbyville; R. Dan Braun, M.D., Chattanooga; Lonnie Burnett, M.D., Nashville; D. Gene Clark, Johnson City; Betty DeBusk, R.N., Knoxville; Judge George H. Garrett, Kingsport; Sheldon B. Korones, M.D., Memphis; Thomas Lester, M.D., Knoxville; Cheryl Major, R.N., Nashville; Jesse

Miller, M.D., Jackson; (Alternate) Walton W. Harrison, M.D., Jackson; Mildred Stahlman, M.D., Nashville; Donald W. Tansil, M.D., Cookeville; Robert Young, M.D., Union City. E. Conrad Shackelford, Jr., M.D., Hendersonville, is chairman.

The pediatric component of the Tennessee Perinatal Guidelines was completed and approved by the commissioner on Sept. 13, 1976, but general distribution of this portion of the document was delayed until guidelines for obstetric care were developed. A draft of the Perinatal Guidelines was subsequently presented to the Maternal and Child Care Committee of the Tennessee Medical Association. Thereafter the obstetrical portion of the guidelines was completed by an enlarged subcommittee on regionalization, care levels, staffing, and facilities which included practicing physicians.

The final draft of the guidelines was approved by the Perinatal Advisory Committee on Nov. 30, 1977. On Jan. 18, 1978, at a meeting of representatives of the Perinatal Advisory Committee and the staff of the Department of Public Health, the completed document was presented to the commissioner and was approved.

It is noteworthy that the preface to the Guidelines states that they are goals and are not regulations. The document represents a consensus of the several disciplines that are involved in the delivery of perinatal care throughout the state. It is based upon guidelines developed by the National Perinatal Task Force and published in 1976. Represented on the task force were members of the American Medical Association, American Academy of Family Physicians, American College of Obstetricians and Gynecologists, and the American Academy of Pediatrics.

The Tennessee Perinatal Guidelines will soon be distributed statewide. Staff of the Tennessee Department of Public Health and of the four Regional Perinatal Centers will be available to answer questions about the Guidelines. These Centers are located at E. H. Crump Women's Hospital and Perinatal Center of the University of Tennessee Medical Units at Memphis; Vanderbilt

From the Tennessee Department of Public Health, Nashville.

University Hospital in Nashville; U.T. Memorial Research Hospital in Knoxville, and T. C. Thompson Children's Hospital and Baroness Erlanger Hospital in Chattanooga.

Tennessee Perinatal Care System Guidelines

The professional advice and supervision that constitute perinatal care must be made available for every pregnant woman and her newborn child in Tennessee. Although the vast majority of the newly born are healthy, infant survival is jeopardized in a substantial number who require complex medical attention for severe illness. In many instances, these severe neonatal illnesses can be anticipated, ameliorated or eliminated by special management of high-risk mothers. In the extreme, this type of medical attention entails the recruitment of a variety of professional personnel who are generally concentrated in densely populated communities.

It is in these larger communities that the full spectrum of medical consultants, nurse specialists, laboratory capabilities and facilities with equipment are to be found. Yet the complex medical management of high-risk mothers and infants must be qualitatively the same regardless of the size of the community in which patients reside. That perinatal mortality and morbidity are significantly reduced by the application of our best contemporary technology has been plainly documented for several years.

From this fact alone, there arises a sense of urgency to make such technology available to all mothers and infants in Tennessee, to eliminate any existing inaccessibility to complex care, and to assure a high quality of medical attention in every hospital that renders it, regardless of the complexity of care or location of the hospital.

Optimal care is thus planned for the state as a whole. Available resources—primarily personnel and money—are allocated to avoid duplication of facilities and to assure proper utilization of services, both of which affect the ultimate quality of care. The needs of individual patients will be fulfilled by designating four Perinatal Regions in the state. All levels of care will be available within each region. Each level of care, no matter how uncomplicated or complex, must be of optimal quality.

The sole determinants of where care will be administered within a region, and by what type of personnel, are the severity and complexity of

the illness. Services should be available as close to home as possible, but the transfer of patients from one hospital to another is inevitable if all levels of care are to be delivered to the residents of a Perinatal Region.

A coordinated system within a region requires the designation of certain hospitals for provision of care levels according to their capacity to provide them, and with full agreement of their staff physicians. The Guidelines have been written for that specific purpose. Beyond the designation of care levels, activation of an effective pattern of communication for consultation and for transport of patients will provide functional continuity between diverse hospitals within a region. Fundamental to all these activities is a regional program for continuing education of personnel.

Although the Guidelines are addressed to hospitals as institutional providers of perinatal care, the basic emphasis is on the role of physicians, nurses and other personnel who are the direct and personal providers of such care. The hospital components of the Perinatal Care System include three types of facilities.

Level I hospitals function to provide services primarily for uncomplicated maternity and newborn patients. The number of deliveries in these hospitals is too low to provide an adequate economic base for complex obstetric and newborn care and to provide the caseload needed to attract the necessary staff. The critical considerations in the care of patients anticipating delivery in these hospitals are the earliest possible detection of the high-risk parturient and newborn, and the availability of trained personnel and facilities to provide competent emergency obstetric and newborn care.

In the future units in metropolitan and suburban areas may need to consolidate into larger services due to low utilization and the inability to maintain adequately trained staff, proper equipment and support services. Geographic remoteness may require that some units continue in operation, but they must be assisted in developing channels for consultation, referral and transport of mothers and/or infants with complications.

Level II units will be located in the larger urban and suburban hospitals where often the majority of deliveries may occur. The number of these units may increase as smaller local hospital units are consolidated.

These Level II units will provide a full range of maternal and neonatal services for uncompli-

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Sexuality and the Mentally Retarded

GERALD GUSTWICK

One of the important concerns of most people is sexual functioning, an integral part of which is being looked upon and treated by others as a sexual person. Historically, the mentally retarded have had their basic sexuality denied. Often our own myths and fears about sex have been amplified and projected on the mentally retarded. We have not been sensitive, tender, and confident in assisting them with their problems of sexual growth. In fact, we have often been inhumane.

Society once tended to overcontrol the mentally retarded by de-sexing or denying them sexuality, but it is now becoming aware that handicapped individuals generally have the same sexual feelings, desires, and interests as other people. This is the meaning of being humane about the sexual development of the mentally retarded.

The recent trend toward deinstitutionalization and giving the mentally retarded more opportunities for normal living in the community has pointed up their social deficiencies. Prior to 1968, most publications skirted the subject of sexuality for the handicapped. The publications directed discussions to such safe subjects as marriage, parenthood, and superficial social-sexual behavior.

The current direction focuses on the fact that all people are sexual and encompasses the concept of maleness-femaleness. Instructors now explore the methods by which sexuality can be practiced without conflict in our culture and recognize sexuality as a natural part of life which should not be demeaned.

Medical professionals are often the first to be consulted when problems occur. In many rural areas the family physician is the only available professional to consider the concerns of individuals and families about specific sexuality related problems. In these cases, it is the physician who must facilitate and open discussions of the realities of sexuality and the mentally retarded individual.

Parents of mentally retarded children should be encouraged to have group discussions not only with other parents but also with other people working with the mentally retarded. Parents with concerns and questions about the sexual development of their mentally retarded child often ask such questions as "How do you start discussing sex?" or "What does my child already know about sex?" These questions do not differ greatly from those asked by parents of normal children—and the answers do not vary a great deal! Discussions may be opened by comments about television shows, pregnant acquaintances, or during activities such as bathing, toileting, or dressing.

It should be recognized that discussing sexuality with a mentally retarded individual is not as easy and casual as teaching him to ride a bus. On the other hand, it need not be viewed as a task that must be left to a professional sex educator. Mothers can help their daughters understand their menstruation and breast development in advance by showing and explaining sanitary pads and bras. Fathers can anticipate their son's experimenting with self-stimulation by giving realistic descriptions and the appropriateness or inappropriateness of such behavior.

While older mentally retarded individuals have many of the same sexual feelings, desires, and interests as other people, they often have a significantly different capacity to learn and to understand the various concepts of sexuality. For this reason, sexuality instruction should consider effective instruction methods which relate to the learning behavior of the mentally retarded person.

Sexuality instruction for the mentally retarded is not a short course. To be sure, the basic mechanics can be given in a short period, but it will take a lifetime of listening, answering questions at the earliest reasonable opportunity, and guiding the mentally retarded so that they may work toward their own healthiest point of sexual development. This is true whether an individual's highest point of development remains

From the Tennessee Department of Mental Health and Mental Retardation, Nashville, TN 37219.

in a self-stimulation stage or progresses to taking an emotional partner of the opposite sex and develops an intimate relationship.

Sessions for sexuality instruction should be short, not exceeding 15 minutes, frequent, and on a one to one or small group basis where feelings and thoughts can be expressed openly. Sessions should always allow immediate feedback about information and understanding that the mentally retarded person has internalized. The sessions should be sequenced and chained in such a manner that the mentally retarded individual has learned the necessary information before more is added.

In the past, instruction often has been concerned or limited to prevention—prevention of pregnancy, venereal disease, and offenses toward other people. This approach is often dehumanizing to the individual and may be destructive rather than constructive, as it focuses on reproduction, genital facts, social behavior, and birth control, and not upon the humanistic and enriching aspects.

In developing a humanistic approach to sexuality instruction, the instructor must recognize

that the mentally retarded are developmental human beings. He must recognize that each mentally retarded individual has his own sexual development coded deep within his humanity—that each person has the right to achieve the highest reasonable potential in human sexual development—that hazards and risks are inherent in growing up—that all individuals have an imperative need for a “family-like” environment—that sexuality is part of continuing education and not a crash course.

The most important factor of sexuality instruction for the mentally retarded is the instructor. Because someone is a psychologist or physician does not make him a good instructor in sexuality. It is important to note that not everyone will be comfortable in aiding the mentally retarded with sexuality. An instructor should have a strong motivation to allow the client to question and to learn, rather than simply imposing one's own set of feelings, beliefs, and possible biases about sexuality on the client. Anyone working in the field of sexuality of the disabled must continually search for new and workable methods to instruct the mentally retarded in sexuality.

Public Health Report . . .

Continued from page 610

cated patients, for the majority of complicated obstetric problems, and for certain neonatal illnesses. They will have a highly trained multidisciplinary staff and modern, well-maintained equipment. Where Level II hospitals will vary considerably in their capabilities, the number of obstetric problems and very sick newborns in most of these hospitals may not be sufficient to justify the establishment of a comprehensive intensive perinatal care unit, and thus a few patients with severe obstetric complications and some seriously sick newborns may after consultation be transferred to a Level III unit.

Level III units will provide care for normal patients, but especially for all the serious types of maternal-fetal and neonatal illnesses and abnormalities. Level III units shall provide leader-

ship in preparatory and continuing education to improve the overall quality of care in the region and in generating, developing, and evaluating new concepts and techniques in perinatal care. Additionally, many Level III units will be actively engaged in clinical and basic research related to perinatal health.

The ability to provide earlier intervention in a high-risk pregnancy can substantially reduce or minimize the potential complications in the mother, fetus, or newborn infant. The number of complications to newborns and consequently the number of mentally retarded children will be reduced with important fiscal implications. The Tennessee Perinatal Guidelines hopefully can assist in the delivery of excellent perinatal care in Tennessee.

Highlights of the TMA Board of Trustees Meeting

July 9, 1978

The following is a summary of the actions taken by the Board of Trustees of the Tennessee Medical Association at its regular, third quarter meeting.

THE BOARD:

Out of Hospital Deliveries

Approved the Committee on Maternal and Child Care's recommendation encouraging physicians and hospitals to review local hospital policy regarding rooming, sibling visitation and family centers, in an effort to make hospital deliveries more attractive to prospective parents.

Fetal Deaths

Approved recommendation from the Committee on Maternal and Child Care that the TMA Board of Trustees request the Bureau of Vital Statistics to adopt a 20-week and/or 500-gram fetal birth weight before requiring reporting.

Perinatal Care System Guidelines

Deferred action on guidelines for regionalization, hospital care levels, staffing, and facilities of Tennessee Perinatal Care System.

Legislative Proposals

Approved the following legislative proposals to be pursued in the 91st Tennessee General Assembly:

- (1) Upgrade physician reimbursement under Medicaid to the same level as under Medicare.
- (2) Require all insurance companies writing medical malpractice insurance in Tennessee to issue policies regardless of the type or class of the physician's practice.
- (3) Provide immunity for both the medical society and the insurance carrier in exchange for information on file.
- (4) Repeal Tennessee's antiquated law that requires a blood test and medical examination before marriage, which will be introduced by the Department of Public Health.

Medicaid Data Analysis

Endorsed a Vanderbilt University—Tennessee Department of Public Health program to analyze Medicaid data pertaining to prescribing practices by physicians for certain drugs.

Pamphlet on Costs

Approved publication of a TMA pamphlet on the reasons behind the rising cost of medical care which will be distributed to the general public.

Appointments

Approved the nomination of Robert E. Tooms, M.D., Memphis, for reappointment to the Board of Physical Therapy Examiners along with Bob Christopher, M.D., Memphis, and Jack Huffman, M.D., Memphis, as additional nominations.

Approved the nomination of Lewis F. Cosby, M.D., Johnson City, for reappointment to the Crippled Children's Advisory Committee along with Hossien Massoud, M.D., Chattanooga, and Joe W. Black, Jr., M.D., Knoxville, as additional nominations. Thomas W. Orcutt, M.D., John C. Frist, Jr., M.D., and H. Victor Braren, M.D., all of Nashville,

were nominated to fill the expired term of Greer Ricketson, M.D.

Harry Friedman, M.D., Memphis, was appointed to the TMA EMS Committee.

Impaired Physicians

Accepted the following recommendations from the Committee on the Impaired Physician:

(1) A permanent TMA committee be established composed of 12 members, three members from each grand division of the state and three members-at-large.

(2) That the Committee have the authority to name and utilize physician consultants (those physicians who will confront the identified impaired physician), which should come from all parts of the state.

(3) That the program begin Jan. 1, 1979 with a budget to include primarily travel required by the consultants when verifying the status of an impaired physician with a recommendation as to the final budget to be made to the Board prior to Jan. 1.

(4) The short-range committee goal would be to work with and hopefully rehabilitate the physician with alcohol and drug-related impairments.

(5) The long-range committee goal would be that impairments other than those of alcohol and drug-related, such as mental and physical disabilities and possibly incompetence and fraud, be brought into the program at a later date.

AMA Delegate

Designated David H. Turner, M.D., of Chattanooga as the AMA delegate for the December, 1978, AMA meeting, filling the vacancy left by John H. Burkhart, M.D., who resigned following his election as a member of the AMA Judicial Council.

Office Management Workshop

Endorsed TMA cosponsorship with Practice Productivity, Inc., Atlanta, of a two-day workshop for medical office managers to be held in Knoxville on Dec. 5-6.

Auxiliary Report

Heard a report on activities of the TMA Auxiliary from Mrs. Hoyt Crenshaw, president.

Workmen's Compensation

Approved a request from the TMA Group Insurance Committee to circulate a questionnaire to the membership to ascertain interest in the establishment of a TMA group insurance plan for workmen's compensation coverage.

Membership Eligibility

Referred to the Judicial Council for study and recommendation the present bylaw language regarding county medical society membership eligibility.


Trip to West Indies

Approved the travel committee's recommendation for an 8-day trip to St. Lucia in the West Indies, Feb. 19, 1979.

Multiple Prescriptions

Received for information a resolution from the Tennessee Pharmaceutical Association opposing multiple prescriptions being written on the same prescription form.

Next Meeting Date

Set the next meeting of the Executive Committee for Aug. 24 and the fourth quarter Board of Trustees meeting for Oct. 15, 1978. 

IDENTIFICATION FOR INAUGURATION PHOTO SPREAD—PAGES 576-577

Each photo is described from left to right.

1. Dr. Robert B. Hunter, Chairman of the AMA Board of Trustees, installs Dr. Tom E. Nesbitt as 133rd President of the AMA.
2. Dr. Nesbitt delivers his inaugural address.
3. Walter R. Courtenay, D.D., Minister Emeritus from the First Presbyterian Church in Nashville, gives the invocation.
4. Dr. Manuel A. Bergnes and Mrs. Bergnes, President of the AMA Auxiliary, with the Nesbitts.
5. Dr. John H. Budd, Immediate Past President of the AMA, congratulates Dr. Nesbitt.
6. Dr. Nesbitt meets with the press.
7. Danny Davis and the Nashville Brass entertain at the inauguration.
8. Dr. Nesbitt presiding.
9. Dr. and Mrs. Nesbitt with Mrs. Robert E. McClellan and Dr. McClellan, a partner in Dr. Nesbitt's office practice.
10. Dr. Nesbitt, Mrs. Rudolph E. Kampmeier, Mrs. Nesbitt, Dr. Kampmeier.
11. Dr. and Mrs. Nesbitt in a relaxed moment.
12. Mrs. Mary Miller, Dr. and Mrs. Nesbitt, Mr. Joe D. Miller, Assistant Executive Vice President of the AMA.
13. Friends arrive after a charter bus ride from Nashville. They are Mr. McGavock Dickinson, Dr. A. Brant (Pinky) Lipscomb, (Dr. Nesbitt), Mr. Matt H. Dobson IV.
14. Dr. Nesbitt is congratulated by Mr. L. Hadley Williams, Executive Director of the TMA.
15. Mrs. Nesbitt, Dr. Thomas F. Frist, Sr., Dr. Nesbitt.
16. Dr. Nesbitt, Mrs. John M. Tudor, Jr., Mrs. Nesbitt, Dr. Tudor, a partner in Dr. Nesbitt's office practice.

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JOHN B. DORIAN

**president's
page**

The AMA and You and Me

A few folks from Tennessee went to St. Louis a while back, in June. There were physicians, TMA staff, and just people. We attended the last joint Scientific Program and House of Delegates meeting of the AMA.

In the future, the scientific portion will be conducted on a regional basis, with many small meetings annually. One of the semi-annual House meetings will always be in Chicago, and the other will rotate. The change is an improvement. Involvement in the House has almost totally precluded participation in the scientific programs up until now.

Young Tom Nesbitt did his state and his state medical association proud; he was inaugurated as the AMA's 133rd President. That night was also the reason for the "just people" contingent from Nashville journeying by bus to the Gateway City.

Several items impressed me in regard to the structure of the organization.

One, the AMA is as democratic an organization as there is. Any member is permitted to address any reference committee during its deliberations. Much of the discussion in these committees is inane and repetitious, but here, indeed, is a forum for everyone.

Another impressive point was the representation. Does the AMA speak for me, for you? There are delegates from every specialty, from every cultural background, and from the most diverse areas of the country you can imagine.

How about the chairman from Sedro Woolley, Wash., or the delegates from Thief River Falls, Minn., or Floyds Knobs, Ind., or Atascadero, Calif? Believe me, their philosophies of approaching medical situations are just as varied. There is a single thread of continuity, however, and that is their dedication to patients and their consequent zeal for maintaining and improving a quality health care system for the nation.

Finally, in regard to structure, some members are overrepresented, but none of the members is underrepresented. For the first time, 53 delegates from specialty sections were added to the House of Delegates. There are now 270 voting delegates, in addition to 67 ex-officio, nonvoting members. One specialty was admitted to the House, even though it has fewer than 500 members nationally (a state's delegation size is based on 1 delegate per 1,000 AMA members).

Imbalance will be a growing problem, as more and more specialties and subspecialties seek another voice. Of greater concern, however, is the growing number who have the privilege of the floor, and the high percentage who feel they must avail themselves of that privilege, if they are to properly represent their constituency. Longer debate, more dialogue, and more discussion add up to longer, duller, more entangled, less productive meetings. There will need to be a lid placed on the total number of delegates at some point. I hope it's soon.

The House of Delegates considered more than 300 items of business. As in any democracy, it's a marvel that anything is accomplished. It is a plodding, and even tedious process at times, but it is productive. I'm reassured that the AMA is an effective spokesman for me, and that there are many tangible reasons for you and me to belong.

Sincerely,

John B. Dorian, M.D.
PRESIDENT

Journal of the Tennessee Medical Association

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AUGUST, 1978

jurisdiction, although any change must be approved by the House, which cannot change the wording but can only approve or disapprove the document. And yet, in order for the Principles to have as much acceptance as possible, the Council has moved slowly, not wishing to be arbitrary.

There is sentiment among some TMA members (and members of other state societies as well) not to tamper with the current Principles. I submit that there are reasons why at least a few changes must, or at least should, be made. The first, and most pressing, is that there is language in at least one of the sections—Section 3—which makes the AMA liable to antitrust action. Another reason less pressing to many of us, but very important to some, is the removal of the masculine pronoun to refer to a physician. In spite of the fact that this pronoun has always been used generically to refer to mankind, both sexes, usage which I have refused to budge on elsewhere, I think in this instance, where we must be as uncontroversial as possible, the change is warranted.

There are some specific areas in which I personally believe the new Principles are not only no improvement but do not serve as well. I have transmitted this information to the Council, for whatever it is worth.

The two documents are presented in their entirety, on two adjacent columns in the May issue of the Journal (*J Tenn Med Assoc* 71:377, 1978). We are about to have a revision. Your ideas are valued, and should be transmitted to your AMA delegates, or to John Burkhart, M.D., of Knoxville, who is a member of the Judicial Council. As we will have to live with it, we should be as comfortable with it as possible.

J.B.T.

editorials

Principles of Medical Ethics — A New Version

It is no secret that the AMA Judicial Council is reworking the *Principles of Medical Ethics* under which we operate, nor is it a secret that there has been a lot of discontent with the revision as it now stands. I think—or in fact, I know—that a revision is going to be approved, possibly by the next House, but certainly by next summer. The Judicial Council has final

Dr. Jekyll and Mr. Hyde

One of the criticisms of President Nixon was that he had imperialistic tendencies. This was brought on by his institution of a “palace guard” at the White House, with uniforms out of a Viennese operetta. It was doubtless unwise of him, but we “hadn’t seen nuthin’ yet!”

One must wonder about the thought processes, if any, which would lead a man who has sufficient intelligence to rise to the Presidency of the United States to make a statement that “. . . we *let* doctors organize into the AMA . . .” He would not dare (yet) to make such a statement about labor. Can you imagine the furor which would

have arisen had he said, "we *let* the teamsters organize into a union"? As it was, the editorial furor was not small. The *Washington Post* editorialized that the verb *let* "has an unwholesome connotation as though the right to organize could be extended or revoked as someone saw fit."

The disturbing thing is that this appears to be precisely what Mr. Carter does think, and that given half a chance, he would withdraw that "privilege" tomorrow, if not sooner. If he would withdraw it from doctors, he would withdraw it from labor too, or from anyone else who irritated or crossed him. These are hallmarks of a petty tyrant, striking at the very roots of democracy. And Dr. Jekyll has a perfect Hyde in his Secretary of Health, Education and Welfare. We and all other groups they have "let" organize would be well advised to keep a firm grasp on the family jewels.

J.B.T.

Think Big — But Walk Softly

There is something to be said for bigness. Big universities can assemble big faculties, teach lots of students, and fund big research projects. Big corporations can produce more good things more cheaply. Big governments can amass the funds and manpower to do things for us which smaller governments cannot. Big churches can have lots of ministers and have big budgets to send out lots of missionaries. Everybody goes to the big city for everything. And big armies win wars (that big countries start).

There is something to be said for bigness—but not much. Big universities tend to forget their first responsibility is to teach students. Big faculties are more interested in their big research programs. I watched the transformation of a small university, with a small faculty which made up a close family, and which had close ties with the students, into an inefficient monster with no soul.

Big corporations, which could produce more things more cheaply, in fact usually produce just more cheap things. Big governments could do things the smaller local governments cannot afford, but what they mainly do is amass bureaucrats who simply serve each other, if they serve anyone but themselves, and pay for it by printing more money, making taxes go up, pauperizing the electorate.

There are lots of things you can do in big cities—almost anything you like, such as go to concerts, plays, good restaurants—lots of things. There are also lots of things you can get done to you—almost anything you don't like, such as cheated, robbed, ripped off, mugged, raped, taxed to death, run over—lots of things.

Big churches should be able to minister to their flocks better and have more outreach, but they only hire more people. They forget the greatest mission field is the ghetto down the block, and that their greatest supply of ministers, along with those who need ministering to the most, are within their own membership.

I guess maybe if bigness really counts anywhere, it is in the military and on the sports fields, but then the fable of the hare and the tortoise, which we see acted out daily, indicates that the race is not always to the swift, and Korea and Vietnam proved the strong do not necessarily win the battle, especially if they are not allowed to fight to win.

The rural South (and probably the rural everything else—I just happen to be more familiar with the South) has always harbored a deep suspicion of bigness; yet they wish for big farms, big cows, and big incomes, and revel in the big sky, big mountains, and big rivers.

This is not a paean to smallness nor it is a denunciation of bigness, as only God is capable of handling either. Bigness tends to make the big despotic, overbearing, authoritarian, wasteful and greedy. Smallness makes for covetousness, penuriousness, combativeness, and greed in the small. It helps if we keep in mind that everything is relative; a dog is big to a flea but doesn't stand a chance against an automobile. In addition bigness is not a function of size alone.

If a corporation sets out to serve humanity, if it sets out to make the world's best widget and make it available at the lowest possible cost, and does it without taking thought to its own size, every other widget maker will be put out of business, and Wonder-Widget Co. will be a world beater. If it sets out to make its owners rich, or if in its pride it cuts corners and its widget becomes shoddy as its price goes up, Wonder-Widget will die.

And it will deserve to.

Large and small take note: the business of the medical profession is to serve humanity. If we truly make that our aim, though there will be some battles lost here and there, neither the trial lawyers, Peter Bourne, Joe Califano, the Con-

gress, nor Jimmy Carter can touch us over the long haul.

If we ignore the public's clear warning, God Himself cannot help us, and we will deserve what we get. And from the way things are shaping up, we *will* get it. Soon.

J.B.T.

Extinction

At the outset I need to say that this is not an editorial on the merits of the case of the snail darter vs. the Tellico dam; the outcome in the courts apparently depended on a strict interpretation of the law as passed by the Congress. The decision has generated a multitude of editorials and letters to the editors. It is a hot issue.

The gist of these writings pro and con has been the idea of reverence for life vs. the obvious fact that the extinction of the snail darter will not badly—or even minimally—affect the ecosystem. Mostly they ignore two points which seem to me crucial.

The first is that if the Tellico dam were to take precedence over the survival of snail darter, where would we stop? The Tellico dam also is unnecessary, except to provide recreation. The stream it would dam and destroy is one of the most beautiful in the world and already provides recreation. Damming it would flood a lot of beautiful farmland, a commodity which shows signs of diminishing to the point of short supply. What species would be sacrificed next?

The second point is that while the extinction of the snail darter would indeed not upset—or more properly, *further* upset—the ecosystem, the extinction of man would be an absolute blessing to the ecosystem. It might even preserve it.

If man continues his preoccupation with becoming Lord of the universe, the chances are excellent that the ecosystem will be the only winner—that is, unless it too is incinerated.

J.B.T.



Information Request

To the Editor:

In preparation for a September meeting of the National Institute of Allergy and Infectious Diseases

to consider the feasibility and advisability of making the insect sting kit available to certain trained categories of medical and lay persons, without a specific prescription by a physician, I would be interested in receiving information and comments by the readers of this journal on the following questions:

1. Have you any knowledge of a fatal reaction to an insect sting or drug or food? If so, I would appreciate as much detail as possible, including information concerning the time interval between contact with the offending agent and death.

2. If you know of such a fatality or fatalities, in your estimation, would an immediate subcutaneous injection on the scene of a premeasured dose of epinephrine 1:1000 (0.3 cc to 1.5 for adult 0.2 to 0.3 cc for children) have afforded a different outcome?

3. Have you any knowledge of adverse effects of subcutaneous injections of epinephrine 1:1000 in the above dosages? If so, again I would appreciate as much detail as possible.

Claude A. Frazier, M.D.
Doctors Park, Bldg. 4
Asheville, NC 28801



J. Mansfield Bailey, age 81. Died June 22, 1978. Graduate of Vanderbilt University School of Medicine. Member of Nashville Academy of Medicine.

Willard H. Bennett, age 51. Died June 5, 1978. Graduate of Tulane University School of Medicine. Member of Washington-Carter-Unicoi County Medical Association.

George Carpenter, age 81. Died June 14, 1978. Graduate of Vanderbilt University School of Medicine. Member of Nashville Academy of Medicine.

Sam U. Crawford, Jr., age 44. Died June 13, 1978. Graduate of University of Tennessee School of Medicine. Member of Putnam County Medical Society.

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Tedford Steve Taylor, M.D., Elizabethton

tional Alumni Association dinner. Dr. Sherrod is the founding orthopedic surgeon for the Crippled Children's Service for Upper East Tennessee.

Charles W. White, M.D., Lexington, was elected chief of staff of the Lexington Henderson County Hospital medical staff for the coming year. Other officers elected were *Wesley F. Jones, Jr., M.D.*, vice chief of staff; and *Warren C. Ramer, Jr., M.D.*, secretary, both of Lexington.

programs and news of medical societies

Maury County Medical Society

The Maury County Medical Society met on June 12 at the Chalet Restaurant, with 28 members and five guests in attendance. Dr. John Warner, a neurologist, spoke on "Six Ways to Avoid Neurological Consultations." In his talk, he discussed hyperventilation syndrome, meralgia paresthetica, idiopathic facial palsy, tension headache, tremors and traumatic neuropathy. He also gave an audiovisual demonstration of diagnosis of carotid vascular disease by Doppler Ultrasound. Dr. Tom Dake, president of the Society, presided over the business meeting.

personal news

Harry Guffee, M.D., Franklin, was honored for his service to the people of Williamson County when the second floor of the new addition at the Williamson County Hospital was dedicated to him.

James W. Hall, M.D., Trenton, has been named president of the University of Tennessee National Alumni Association.

Charles E. Jordan, M.D., Cookeville, has been inducted as a Fellow of the American Society for Head and Neck Surgery.

Hyman M. Kaplan, M.D., Chattanooga, has been elected a Fellow of the American College of Physicians.

John W. Runyan, Jr., M.D., Memphis, has been granted the 1978 L. M. Graves Memorial Health Award, recognizing Dr. Runyan's contributions in designing a model for delivering health care services, which established primary care clinics in community public health stations staffed by specially trained nurse practitioners.

Howell H. Sherrod, M.D., Johnson City, was the recipient of one of the Outstanding Alumni Awards at the annual East Tennessee State University Na-

medical news in tennessee

Second Annual Athletic Injuries Conference Held at MTSU

The Second Annual Athletic Injuries Conference sponsored by the TMA Committee on Emergency Medical Services was held in July during Tennessee Secondary School Athletic Association Coaches School held at Middle Tennessee State University in Murfreesboro.

The purpose of the Conference was to apprise high school coaches and trainers of preventive measures as well as first aid treatment for the more common injuries sustained on the practice field and in the game.

Nine physicians appeared on the program, and response by coaches and trainers was excellent, as evidenced by the large attendance and the many complimentary remarks.

Tennessee physicians desiring to become a part of future programs are encouraged to communicate their wishes to Daniel J. Scott, Jr., M.D., Chairman, EMS Subcommittee on Sports Injuries, Tennessee Medical Association, 112 Louise Ave., Nashville, TN 37203.

From the AMA's Office in Washington, D.C.

Education for Disease Prevention Planned

The AMA has supported the overall goals of the wide-ranging disease prevention-health promotion bill introduced by Sen. Edward Kennedy (D-Mass.).

"Basic to success must be a major and continuing effort to educate the American people in healthful lifestyles and the importance of preventive medicine," testified Lowell H. Steen, M.D., a member of the AMA Board of Trustees. "Because results of such activities will not be visible overnight, we recommend a long-term commitment to these endeavors," said Dr. Steen.

Consideration of the bill now is "propitious," since public attention can be focused on the health issues to be considered at the July conference "Focus on Positive Health Strategies," jointly sponsored by Kennedy and the AMA, Dr. Steen noted.

The bill provides a new program of federal formula grants to states to assist them in meeting the costs of planning and providing health services. These state programs would be directed at reducing the five leading causes of mortality within the state through systems of early detection, screening and prevention of these conditions. A state could also receive formula funds for programs designed to reduce the five leading causes of morbidity within the state.

Special project grants would also be available for (1) treatment of hypertension; (2) immunization of children; (3) community fluoridation programs; (4) prevention of illnesses caused by environmental factors; (5) prevention of rodent-borne diseases; (6) physical fitness activities; and (7) lead-based paint poisoning prevention.

Dr. Steen said the AMA is pleased that the states would have a major role in determining priorities for the disposition of funds. "We have long stressed the importance of state and local action in health matters and we are encouraged by this proposal."

The proposed level of funding might not be sufficient to reduce the rates of mortality or morbidity in a state effectively, Dr. Steen said. "It would indeed be unfortunate for Congress to develop a major disease prevention initiative, yet to fund it inadequately so that the effort might not get off the ground." He suggested that initially funds be concentrated on disease prevention programs.

Dr. Steen said programs such as those anticipated in the bill could substantially improve health, but "we should not be deceived into believing that these programs are a cure-all. Basic to success must be a major and continuing effort to educate the American people in healthful lifestyles and the importance of preventive medicine."

AMA Backs Minority Programs

Immediately following the Supreme Court decision in the Bakke case, C. H. William Ruhe, M.D., AMA's senior vice-president, made these comments on behalf of the Association:

"The Supreme Court ruling seems to permit medical schools to continue using race as one factor in determining admission criteria. We hope that medical schools will, therefore, continue to use those selective admissions programs designed to increase the numbers of minority students. It is only through these types of programs that we can hope to increase the numbers of minorities in the practice of medicine.

"The American Medical Association has long been in support of programs designed to increase minority representation in medical schools and in the practice of medicine. This position was reaffirmed last week in St. Louis at the Association's Annual Meeting through acceptance of a manpower report of the AMA Council on Medical Education. The report addresses the issue of 'Black and Other Minority Group Physicians' with the opening statement: 'The inadequate representation of minority groups in the medical profession and in medical school enrollments remains of concern to the AMA.'"

CLIA Clears Ways and Means

The House Ways and Means health subcommittee has approved the Clinical Laboratory Improvement Act.

The new provision would prohibit percentage contracts with hospital-based physicians unless the charges were "reasonable" in terms of what the hospital would have paid for such services if the physician had been employed by the hospital, and the cost of other "reasonable expenses" incurred by physicians in performing the services. This provision would be applicable to clinical laboratories outside of a hospital.

The health subcommittee also approved language which provides that "if the Joint Commission on Accreditation of Hospitals imposes standards for hospital laboratories that are at least equivalent to the national standards, the secretary of HEW (or the state, in the case of a state with primary enforcement responsibility) could deem a laboratory in a JCAH-accredited hospital to be in compliance with the national lab standards."

The CLIA bill extending federal regulations over clinical labs has passed the Senate and the House Commerce Committee which sent it to Ways and Means. All the bills are similar. The physician office exemption in Senate was not mandatory. The House exemption is automatic for groups of five or fewer, or for any size group if tests are done by the physicians themselves.

Rep. Rogers Retires

Rep. Paul G. Rogers, 57-year-old Florida Democrat whose name is often synonymous with health

legislation on Capitol Hill has decided to quit the House after 12 terms. Chairman of the House Interstate and Foreign Commerce Committee's subcommittee on health and environment, Congressman Rogers has gained the reputation of a knowledgeable, tough but always fair, prime mover of health legislation in the House.

Facing no important opposition at home (parts of Broward and Palm Beach counties), Rogers said he merely wants to try "a change of career" and is "open to offers."

Candidates to succeed him include Reps. David Satterfield (D-Va.), Richardson Preyer (D-N.C.) and James Scheuer (D-N.Y.), ranking members of the subcommittee.

HEW Has Budget Blues

The House approved a \$55 billion money bill for the Health, Education and Welfare Department, both more and less than the administration requested. The confusion arose because the House added \$641 million to specific programs, but also voted a \$1 billion general chop that may prove meaningless. Another \$17 billion of HEW programs must go through the appropriations mill, since the House is deferring action on these programs until their extended authorizations are approved later this year.

An amendment denying federal funds for Medicaid abortion payments unless the mother's life is imperilled was adopted by the House ensuring still another controversial go-around with the Senate on the emotional issue.

The bill is now in the Senate awaiting action.

The rather muddled budget situation saw HEW Secretary Joseph Califano writing letters to lawmakers deploring "meat ax" cuts on the one hand and threatening a Presidential veto for too fat a bill on the other.

The \$1 billion "out" in effect was a challenge to Califano's report earlier this year charging that fraud, waste and abuse is costing the Department more than \$6 billion a year. If that's the case, the House was saying, then at least \$1 billion ought to be saved through cracking down on the waste. However, no specific program reductions were required, nor will any services apparently be cut.

Much of the increase over the Carter budget voted by the House was for health manpower and general education outlays, which the administration wanted trimmed. The National Institutes of Health received \$305.7 million more than the budget figure.

Many of the health program appropriations were sought by the AMA which had urged that key programs, especially in the health manpower and national health service corps areas, not be slashed.

Rep. Robert Giaimo (D-Conn.), chairman of the House Budget Committee, recently told the AMA that "with a few notable exceptions, we adopted the same strategy you outlined . . . for funding health programs."

"With respect to programs which support health

care services, training of health manpower and biomedical research, the committee recommended adding \$250 million to the President's budget request," said Giaimo. "This total is in line with your recommendations, with the exception of the health professions education program for which you suggest fairly sizeable increases."

The Budget Committee chairman also said in a letter to James Sammons, M.D., AMA Executive Vice President, that "I am pleased on the whole that the AMA recognizes the need to constrain the rising costs of health care programs and has joined with hospital associations to reduce the rate of increase in hospital costs."

GAO Torpedoes Navy Center

The F. Edward Hebert Naval Regional Medical Center in New Orleans is a \$22 million white elephant that should be abandoned by the Navy, reports the General Accounting Office. The Defense Department agrees with the findings.

The GAO, Congress' investigative agency, said the Westbank installation has a daily average patient load of 23, less than 10% of the 250-bed capacity. The potential for increasing the workload significantly "is virtually nonexistent," said GAO.

No blame was assessed by the GAO in its findings on the new installation that was dedicated in 1976 to Rep. F. Edward Hebert (D-La.), former chairman of the House Armed Services Committee.

Annual operating and payroll costs for the hospital amount to more than \$7 million. GAO suggested the facility be used by the state of Louisiana for a planned adolescent mental health care installation or that it be leased to Westbank Medical Center, Limited, which operates a nearby for-profit hospital.

Cost Cap Stalled

The Congress recessed for the Fourth of July holiday without the House Commerce Committee taking final action on the administration's proposed hospital cost containment legislation. May and June have seen a bitter struggle within the seesawing committee, marked with a number of recriminations, including one that the White House had agreed to back a new \$75 million Veterans Administration hospital in Camden, N.J., after Rep. James Florio (D-N.J.) decided to back the cost containment bill.

The two-month struggle has pitted the Carter administration's attempt to place an artificial cap on hospital revenues—an imposition of controls on just one part of the economy—against a voluntary effort group (VE) comprised of the American Medical Association, the American Hospital Association and the Federation of American Hospitals.

The above summary paragraphs describe the hospital cost containment situation as of press time.

—Ed.

CALENDAR OF MEETINGS

NATIONAL

1978

- Sept. 10-14 American Academy of Ophthalmology and Otolaryngology, Convention Center, Las Vegas
- Sept. 10-14 American Society of Ophthalmologic and Otolaryngologic Allergy, Dunes Hotel, Las Vegas
- Sept. 10-15 Flying Physicians Association, Astro Village Hotel, Houston
- Sept. 11-13 National Conference on the Care of the Child With Cancer, sponsored by American Cancer Society, Sheraton Hotel, Boston
- Sept. 13-16 American Thyroid Association, Benson, Portland, Oregon
- Sept. 14-16 American Association for the Surgery of Trauma, Hyatt Lake Tahoe, Lake Tahoe, Nevada
- Sept. 14-16 South Central Association for Clinical Microbiology, Stouffer's Dayton Plaza Hotel, Dayton, Ohio
- Sept. 17-21 World Federation of Nuclear Medicine and Biology, Hilton Hotel, Washington, D.C.
- Sept. 19-21 American College of Emergency Physicians, Hyatt Regency & Sheraton, Houston
- Sept. 20-22 American Academy of Occupational Medicine, Williamsburg Inn, Williamsburg, Virginia
- Sept. 21-14 American Society of Bariatric Physicians, Fairmont Hotel, New Orleans
- Sept. 22-24 American Neurological Association, Shoreham-Americana Hotel, Washington, D.C.
- Sept. 23-27 American Fracture Association, Brown Palace Hotel, Denver
- Sept. 24-30 American College of Gastroenterology, Marriott Hotel, Denver
- Sept. 25-28 American Academy of Family Physicians, Fairmont Hotel, San Francisco
- Sept. 29-30 American Society of Internal Medicine, Orlando, Florida

- Oct. American Association of Ophthalmology, Kansas City, Missouri
- Oct. 1-6 Civil Aviation Medical Association, Frontier Hotel, Las Vegas
- Oct. 4-6 Clinical Orthopaedic Society, Detroit
- Oct. 6-8 American Society for Surgery of the Hand, Four Seasons Hotel, Albuquerque, New Mexico
- Oct. 10-14 American Medical Writers Association, Fairmont Hotel, San Francisco
- Oct. 15-16 American College of Preventive Medicine, Los Angeles
- Oct. 15-19 American Public Health Association, Convention Center, Los Angeles
- Oct. 16-18 American Association of Public Health Physicians, Los Angeles
- Oct. 17-22 Society for Clinical and Experimental Hypnosis, Grove Park Inn, Asheville, North Carolina
- Oct. 19-20 Conference on Alcohol, Youth and Public Policy, Sheraton National Hotel, Arlington, Virginia
- Oct. 19-23 American Institute of Ultrasound in Medicine, Town and Country Hotel, San Diego
- Oct. 20-21 Society for Adolescent Medicine, Chicago
- Oct. 21-25 American Society of Anesthesiologists, Chicago
- Oct. 21-26 American Academy of Pediatrics, Palmer House, Chicago
- Oct. 22-26 American Academy of Ophthalmology and Otolaryngology, Convention Center, Kansas City, Missouri
- Oct. 22-26 Association of American Medical Colleges, Hilton Hotel, New Orleans
- Oct. 25-28 American Group Practice Association, Marriott Hotel, New Orleans
- Oct. 28-Nov. 2 American College of Chest Physicians, Hilton Hotel, Washington, DC
- Oct. 31-Nov. 4 American Society of Therapeutic Radiologists, Century Plaza Hotel, Los Angeles

STATE

- Sept. 11-12 Tennessee Valley Medical Assembly, Chattanooga Choo Choo Convention and Concert Hall

The continuing medical education accreditation program of the TMA has full approval by the Liaison Committee on Continuing Medical Education. An accredited institution or organization may designate for Category 1 credit toward the AMA Physician's Recognition Award those CME activities that meet appropriate guidelines. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Ave., Nashville, TN 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

IN TENNESSEE

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman, can plan an individualized program of one to four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, ward rounds, learning individual procedures, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

Participating Departments and Divisions

Allergy & Immunology	Samuel Marney, M.D.
Anesthesiology	Bradley E. Smith, M.D.
Cardiology	Gottlieb C. Friesinger, III, M.D.
Chest Diseases	James D. Snell, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Dermatology	Lloyd King, M.D.
Diabetes	Oscar B. Crofford, M.D.
Endocrinology	David Rabin, M.D.
	David N. Orth, M.D.
Gastroenterology	Steven Schenker, M.D.
General Internal Medicine	W. Anderson Spickard, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.
Medicine	Grant W. Liddle, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Oncology	Robert Oldham, M.D.
Orthopedics	Paul W. Griffin, M.D.
Pathology	William H. Hartmann, M.D.
Pediatrics	David T. Karzon, M.D.

Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Everette James, Jr., Sc.M., J.D., M.D.
Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sergeant, M.D.
Surgery	
Cancer Chemotherapy	Vernon H. Reynolds, M.D.
General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neill, M.D.
Plastic	John B. Lynch, M.D.
Renal Transplantation	Robert E. Richie, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.

Eligibility: All licensed physicians are eligible.

Administrative Fee: \$200.00 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1) and American Academy of Family Physician's Continuing Education accreditation.

Application: For further information and application, contact: Paul E. Slaton, M.D., Director, Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

Continuing Education Schedule 1978-79

Sept. 14	Recognition and Management of Learning Disabilities
Sept. 15-16	Infectious Diseases: 9th Annual Pediatric Symposium (9 hours)
Sept. 21-22	Postgraduate Course in Allergy—Jackson, Miss.
Sept. 27-30	Symposium on Diagnostic Imaging
Sept. 29-30	Advanced Cardiac Life Support Course (12 hours)
Sept. 29-30	Symposium on Nutritional Therapy
September, 1978	2nd Annual John S. Zelenik Lecture in Obstetrics & Gynecology (1 hour)
October, 1978	William F. Orr Lectureship in Psychiatry
Oct. 31-Nov. 4	7th Annual Rhamy & Shelley Lectureship in Urology (16 hours)
Nov. 9-10	Symposium on Marital Therapy
Nov. 30-Dec. 1	American College of Physicians Regional Meeting
Dec. 1-2	High Risk Obstetrical Seminar (11 hours)
Jan. 20-21	Comparative Leukemia Conference
Feb. 14-15	1st Annual Harry S. Abram Memorial Symposium on Medical Ethics
Spring, 1979	Annual L. W. Edwards Memorial Lecture in Surgery (1 hour)
Spring, 1979	Annual Barney Brooks Lectureship in Surgery (1 hour)
Spring, 1979	2nd Annual Family Therapy Symposium

Spring, 1979	8th Annual James C. Overall Visiting Professor in Pediatrics
Spring, 1979	Family Practice Intensive Review (40 hours)
April, 1979	American Academy of Orthopedic Surgeons Short Course
April, 1979	Modern Concepts in Oncology
April, 1979	3rd Annual Gynecological Oncology Course (10 hours)
April 26	Annual Frank H. Luton Lecture in Psychiatry (1 hour)
May, 1979	Scientific Sessions of the Vanderbilt Medical Alumni Reunion
May, 1979	18th Annual Seminar in Psychiatry (for nonpsychiatrists) (10 hours)
July 25-29	2nd Annual Symposium on Contemporary Clinical Neurology (16 hours)
August-October, 1979	Internal Medicine Intensive Review (33 hours)

For information contact: Vanderbilt Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

MEHARRY MEDICAL COLLEGE SCHOOL OF MEDICINE

Extended Continuing Education Program

Arrangements have been made with the following services and departments in the medical school to allow practicing physicians to participate in that service's activities for a period of one to four weeks. This program provides an opportunity for physicians to study in depth for a specified period. The schedule of activities is individualized in response to the physician's request by the participating department. The experience includes conferences, ward rounds, audiovisual materials and contact with patients, residents and faculty.

Participating Departments

Anesthesiology	Ramon S. Harris, M.D.
Family Practice	John Arradondo, M.D.
Internal Medicine	
Cardiology	John Thomas, M.D. Kermit R. Brown, M.D. Qamar A. Kahn, M.D.
Chest Disease	Joseph M. Stinson, M.D. Paul A. Talley, M.D. Edward A. Mays, M.D.
Dermatology	Thomas W. Johnson, M.D. David Horowitz, M.D.
Gastroenterology	Ludwald O. P. Perry, M.D. Buntwal M. Somayaji, M.D.
General Medicine	Edward A. Mays, M.D.
Hematology/Oncology	Robert S. Rhodes, M.D. Robert S. Hardy, M.D.
Neurology	Calvin L. Calhoun, Sr., M.D. Gregory Samaras, M.D.
Obstetrics & Gynecology	Henry W. Foster, M.D.
Gynecological Endocrinology	Elwyn M. Grimes, M.D.
Ophthalmology	Axel C. Hansen, M.D.
Orthopedics	Wallace T. Dooley, M.D.
Pathology	Louis D. Green, M.D. John C. Ashhurst, M.D.
Pediatrics	E. Perry Crump, M.D.

Surgery	
General	Louis J. Bernard, M.D.
Neurological	Charles E. Brown, M.D.
Thoracic and Cardiovascular	David B. Todd, M.D. Ira D. Thompson, M.D.
Urology	Marcelle R. Hamberg, M.D.

Fee: \$100 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1), American Academy of Family Physicians Continuing Education Accreditation and Continuing Education Units by Meharry Medical College.

Application: For further information contact Frank A. Perry, M.D., Director, Continuing Education, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

Continuing Education Schedule

October	Cleve Ewell Hematology Seminar (6 hours)
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For information contact Frank A. Perry, M.D., Director of CME, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

UNIVERSITY OF TENNESSEE CENTER FOR THE HEALTH SCIENCES

Continuing Education Schedule 1978-79

This comprehensive listing of UTCHS courses includes programs of the Chattanooga, Knoxville, and Memphis units. The codes (C), (K), and (M) indicate the continuing education unit handling the arrangements for a particular program.

Sept. 13-15	(M)	Cardiac Auscultations
Sept. 21-22	(M)	10th Memphis Conference on Mother, Fetus, and Newborn
Sept. 22	(C)	Dermatology for the Family Physician
Sept. 27- Oct. 11	(M)	Current Issues in Cardiology & Pulmonary Disease; EKG Interpretation (Mediterranean Cruise visiting France, Egypt, Israel and Greece)
Sept. 28-29	(C)	Current Methods in OB/GYN
Sept. 28-29	(M)	Medical and Surgical Emergencies (Jackson)
Oct. 5-7	(C)	Diagnostic Radiology for the Primary Care Physician
Oct. 12-14	(K)	Office Ultrasound
Oct. 22-24	(K)	Cancer Concepts 1978 (Gatlinburg)
Oct. 26-27	(C)	Emergency Medicine
Oct. 26-28	(M)	Medical Alumni Day
Oct. 27-29	(K)	Tennessee Radiological Society Meeting
Nov. 2-3	(M)	Clinical Evaluation & Management of Chronic Pain

- Nov. 15 (C) Nosocomial Infections
- Nov. 17 (K) 7th Annual Internal Medicine Symposium
- Nov. 30- (C) Nephrology-Urology Update
- Dec. 1
- Dec. 8-9 (M) Otolaryngology for the Primary Care Physician
- Dec. 26- (C) Hawaii (Departing from Chat-
- Jan. 1 tanooga)

1979

- Jan. 24-26 (M) Audiometric Orientation — first session
- Jan. 25-26 (C) Allergies
- Feb. 7-9 (M) Gynecologic Urology
- Feb. 12-13 (M) Practical Office Dermatology
- Feb. 23-24 (C) Gut Problems: A Clinical Approach—St. Petersburg, Fla. (Tierra Verde)
- Feb. 24- (K) Caribbean Cruise (Departure
- March 2 from New Orleans with stop in Havana)
- March 5-8 (C) Diagnostic Radiology for the Primary Care Physician (Sahara Tahoe, Stateline, Nevada)
- March 18-24 (M) Review Course for Family Physicians
- March 29-30 (C) Pediatrics
- April 6 (C) Advances in the Diagnosis and Management of Hypertension
- April 9-17 (C) Infectious Disease for the Clinician—Caribbean Cruise—Departure from Santa Domingo
- April 16 (M) Modern Approach to Hypertension
- April 26-27 (C) Orthopaedics
- April 26-27 (M) Lee Buring Memorial Conference
- May 7-9 (M) 4th Annual Symposium on Reproductive Medicine
- May 10-11 (C) Rheumatology (Gatlinburg)
- May 17-19 (M) Practical Otolaryngology for the Primary Care Physician
- May 21-25 (M) 3rd Annual Internal Medicine Review Course
- June 6-8 (M) Audiometric Orientation — second session
- June 6-9 (M) Basic Electrocardiography
- June 7-10 (C) Family Practice Review Course
- June 9 (M) Audiometric Orientation — refresher course
- June 11-14 (M) Fundamental Principles of Rhinoplasty
- Aug. 23-25 (M) ENT Postgraduate Review

For further information about any of these courses, please contact the appropriate individuals below:

- (C) Mr. LeRoy J. Pickles, Director of Continuing Medical Education, UTCHS/Clinical Education Center, 921 E. Third St., Chattanooga, TN 37403, Tel. (615) 756-3370.
- (K) Dr. Harvey L. Goodman, Director of CME,

UTCHS/Knoxville, Box 116, 1924 Alcoa Hwy., Knoxville, TN 37920, Tel. (615) 971-3345.

- (M) Mr. Wallace Mayton, Director of Conferences, Div. of Continuing Education, UTCHS, 800 Madison Ave., Memphis, TN 38163, Tel. (901) 528-5547.

For general information about the total program, contact Dennis K. Wentz, M.D., Director of Continuing Education, Asst. Vice-Chancellor for Academic Affairs, UTCHS, 62 S. Dunlap St., Memphis, TN 38163, Tel. (901) 528-5605.

EAST TENNESSEE STATE UNIVERSITY

Continuing Education Schedule 1978

- Sept. 7-8 Cardiology Today
- Sept. 21-22 Southern Appalachia Regional Health (cosponsored by ARCHA)
- Oct. 5-6 Geriatrics—A Team Approach (cosponsored by Mountain Home VA)
- Oct. 20 Child Abuse
- October Tennessee State Health Conference (cosponsored by UT-Memphis, Vanderbilt, Meharry)
- Nov. 6-7 Child Development Clinic
- Nov. 16-17 Adolescent Medicine
- Dec. 4-6 Occupational Medicine (cosponsored by Tennessee Eastman)
- December Marriage and the Physician

For information contact Dr. Charles F. Johnson, Assistant Dean, East Tennessee State University, College of Medicine, Dept. of Continuing Medical Education, Johnson City, TN 37601, Tel. (615) 929-5364.

IN SURROUNDING STATES

UNIVERSITY OF KENTUCKY

Mini-Residencies for Medical and Surgical Practitioners in Office Management Of Emotional Problems

The objective of this course is to give physicians an ideal emotional counseling technique that fits busy office practices. The technique uses a concept of emotions that is consistent with human anatomy and psycho-physiology. Yet, the technique requires no more physician time or patient cost than routine evaluations of new patients. Finally, the technique is readily understandable and easy for practitioners to apply.

One, two and three week courses. Minimum of 40 hours per week. *Tuition Fee:* \$350 per week for the 1st & 2nd week of training; \$500 for 3rd week of supervised practice with patients in the Intensive RBT Treatment Program.

For further information contact: Maxie C. Maultsby, Jr., M.D., Office of Continuing Medical Education, Dept. of RBT, University of Kentucky, Lexington, KY 40506.

Continuing Education Schedule 1978

- Oct. 27-28 Fluid and Electrolyte Balance Made Simple—Hyatt Regency Lexington, Lexington, Ky. *Credit:* 10 hours AMA Category 1. *Fee:* \$75.
- Dec. 10-15 Ninth Family Medicine Review (Session III) Hyatt Regency Lexington, Lexington, KY. *Credit:* 50 hours AMA Category 1 and AAFP. *Fee:* \$295.

For information contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, KY 40506.

HIGHLANDS BAPTIST HOSPITAL Louisville, Ky.

- Oct. 4-6 Topics in Medical Oncology

For information contact Pat Strait, Symposium Coordinator, 810 Barret Ave., Louisville, KY 40204, Tel. (502) 583-4841, ext. 432.

BOWMAN GRAY SCHOOL OF MEDICINE

Courses in Ultrasound

Three eight-week courses in sonic medicine will be offered at Bowman Gray School of Medicine on the following dates: Sept. 18-Nov. 10, 1978; Jan. 8-March 2, 1979; and April 2-May 25, 1979.

Credit: 30 hours per week in AMA Category 1. Three additional two-day real time courses are offered for obstetricians on Sept. 14-15, 1978; Nov. 16-17, 1978; and March 8-9, 1979. *Credit:* 10 hours per day in AMA Category 1.

For information contact James F. Martin, M.D., Director, Center for Medical Ultrasound, Bowman Gray School of Medicine, Winston-Salem NC 27103.

SOCIETY OF GASTROINTESTINAL RADIOLOGISTS

- Oct. 12-15 Diagnostic Imaging of the Gastrointestinal Tract—Tan-Tar-A, Lake of the Ozarks, Mo. (cosponsored by American College of Radiology). *Credit:* 13 hours AMA Category 1. *Fee:* \$225.

For information contact Walter M. Whitehouse, M.D., Department of Radiology, University of Michigan Hospital, Ann Arbor, MI 48109.

OF SPECIAL INTEREST

AMERICAN CANCER SOCIETY— NATIONAL CANCER INSTITUTE

- Sept. 11-13 National Conference on the Care of the Child with Cancer—Sheraton-Boston Hotel, Boston. *Credit:* AMA and AAFP. *Fee:* None.

For information contact Sidney L. Arje, M.D., ACS-NCI, 777 Third Ave., New York, NY 10017, Tel. (212) 371-2900.

AMERICAN MEDICAL ASSOCIATION

Medical Staff Leadership Seminars—1978

- Sept. 29-30 Fairmont Hotel, New Orleans
Nov. 3-4 Eden Roc Hotel, Miami Beach

Credit: 14 hours AMA Category 1.

Fee: AMA member of medical society staff, \$150; nonmember, \$200.

For information contact AMA Department of Hospitals and Health Facilities, 535 N. Dearborn St., Chicago, IL 60610, Tel. (312) 751-6653.

ESTES PARK INSTITUTE

The Estes Park Institute, a non-profit educational organization, will sponsor Hospital Medical Staff Conferences and Hospital Trustee Forums at the dates and locations below. *Credit:* 30 hours AMA Category 1 (each location). *Fee:* \$190.

- Oct. 1-5 Pocono Manor, Pennsylvania
Nov. 12-16 Pacific Grove, California
Dec. 3-7 Clearwater Beach, Florida

For information contact Estes Park Institute, P.O. Box 400, Englewood, CO 80151, Tel. (303) 761-7709.

BOWMAN GRAY SCHOOL OF MEDICINE

Seminar in Ultrasound

- Aug. 21-23 Advanced Seminar on Ultrasound of the Abdomen and Obstetrics (co-sponsored by Orlando Regional Medical Center)—Dutch Inn, Lake Buena Vista, Fla. *Fee:* physicians \$200; residents and sonographers \$125.

For information contact J. F. Martin, Director, Center for Medical Ultrasound, Bowman Gray School of Medicine, Winston-Salem, NC 27103.

UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE

- Sept. 17-22 Annual Otolaryngologic Assembly of 1978—Eye and Ear Infirmary of the University of Illinois Hospital, Chicago. Presented by the Abraham Lincoln School of Medicine, University of Illinois at the Medical Center.

For information contact Department of Otolaryngology, Illinois Eye and Ear Infirmary, 1855 W. Taylor, Chicago, IL 60612.

UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER—DALLAS

- Sept. 29-30 Basis for Making Therapeutic Decisions: Update of Common Problems

—Zale Lecture Hall, Dallas. *Credit:* 14 hours AMA Category 1; AAFP pending. *Fee:* physicians and pharmacists, \$150; residents and nurse practitioners, \$75.

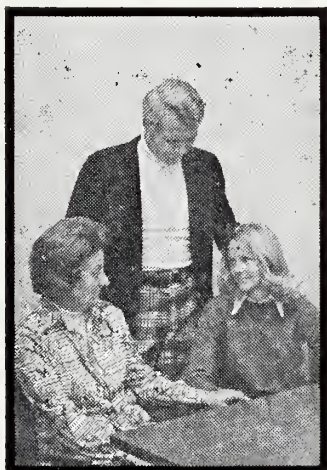
- Oct. 26-28 Nutritional Components of Common Clinical Problems: Facts, Controversies, and Fallacies—Zale Lecture Hall, Dallas. *Credit:* 15 hours AMA Category 1; AAFP pending. *Fee:* physicians, \$175; residents, \$75.

For information contact Norma Wilcox, A. Webb Roberts Center for Continuing Education, 3500 Gaston Ave., Dallas, TX 75246, Tel. (214) 688-2166.

INTERSTATE POSTGRADUATE MEDICAL ASSOCIATION

- Oct. 23-26 63rd Annual International Scientific Assembly of Interstate Postgraduate Medical Association—Washington Hilton Hotel, Washington, D.C. In cooperation with the Dist. of Columbia Acad. of Family Practice; Univ. of Maryland, Baltimore; Howard Univ. and Georgetown Univ., Washington, D.C. *Credit:* 24 hours AAFP prescribed, 4 hours AAFP elective; also AMA Category 1. *Fee:* \$75 in advance; \$100 at meeting.

For information contact Alton Ochsner, M.D., Program Chairman, Interstate Postgraduate Medical Association, P.O. Box 1109, Madison, WS 53701.



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- Oct. 23-27 Current Concepts in Diagnostic Radiology including Ultrasound and CT Scanning—Southampton Princess Hotel, Bermuda. *Credit:* 30 hours AMA Category 1. *Fee:* physicians, \$250; in training, \$125.

For information contact Robert McLelland, M.D., Radiology—Box 3808, Duke University Medical Center, Durham NC 27710, Tel. (919) 684-4397.

WEST PARK HOSPITAL Canoga Park, California

- Oct. 14-22 3rd Annual International Body Imaging Conference—Maui Surf Hotel, Maui, Hawaii. *Credit:* 25 hours AMA Category 1. *Fee:* physicians, \$295; residents and technologists, \$195.

For information contact Ronald J. Friedman, M.D., Conference Coordinator, 3rd Annual Int'l. Body Imaging Conference, West Park Hospital, 22141 Roscoe Blvd., Canoga Park, CA 91304.

NETWORK FOR CONTINUING MEDICAL EDUCATION

Schedule for Upcoming Programs

- Aug. 7- Sept. 3 Edema: Causes and Treatment—with George A. Porter, M.D., University of Oregon Health Sciences Center, Portland.

Pointers for Sponsors of Laws to Curb Public Smoking

Be factual and objective in gathering and organizing your testimony on behalf of a proposed clean air act, and do not criticize either tobacco smokers or their habit.

It is useful to stress the point that although smokers have the right to smoke, the right of the non-smoking majority to breathe comfortably should take precedence. It is unnecessary to discuss the harmful effects of smoking on the smoker, as those facts are not germane to the issue of the health rights of nonsmokers.

Doctors should testify as to the health effects of smoking, but laymen also should be included in the presentation.

Tobacco smoke presents real health problems to allergic and asthmatic persons, infants and children, persons with chronic heart or lung disease, and contact-lens wearers.

Lawmakers, although appreciative of well-prepared medical and scientific facts, listen even more attentively and sympathetically to lay citizens who describe the illnesses and discomforts they suffer when exposed to sidestream tobacco smoke.

The percentage of adults who smoke decreased to 34% in 1975, and recently the nonsmoking majority has been asserting its right to breathe smoke-free air. This has resulted in numerous laws to restrict smoking in public places.

The percentage of physicians, dentists and pharmacists who smoke also has decreased. Only some 20% of physicians now smoke. These individuals see the damage done by smoking in their patients as an inspiration to quit tobacco.

Clinical Center Study of Patients With Gynecomastia

The cooperation of physicians is requested in the referral of patients with gynecomastia for a study being conducted by the Reproduction Research Branch, National Institute of Child Health and Human Development at the Clinical Center, National Institutes of Health, Bethesda, Md.

Patients will receive a complete endocrine evaluation. Reduction mammoplasty will be offered following evaluation. Upon completion of the study, patients will be returned to the care of the referring physicians who will receive a summary of the findings.

Physicians interested in having their patients considered for admission may write or telephone Dr.

D. Lynn Loriaux, Head, Endocrine Service Unit, NICHD-NIH, Bldg. 10, Room 10B-09, Bethesda, MD 20014, Tel. (301) 496-4686; or Dr. Charles Eil, Reproduction Research Branch, NICHD-NIH, Bldg. 10, Room 10B-09, Bethesda, MD 20014, Tel. (301) 496-6418.

Dial Access — Arthritis and Rheumatology

Southern Medical Association announces its newest Dial Access Program—on Arthritis and Rheumatology. Providing the most recent diagnostic and therapeutic information on specific problems in arthritis and rheumatology, it is available 24 hours a day, seven days a week, at no charge to physicians.

Dial Access is a method of medical consultation by means of tape-recorded messages that are accessible on request through long-distance, toll-free telephone calls. The system is approved for credit toward the AMA Physician's Recognition Award, and by simply listening to these tapes a doctor may accumulate Category V credit.

Hospitals Show Real Progress In Curbing Cost Escalation

Doctors and hospitals are beginning to get a handle on the rising cost of hospital care, Paul W. Earle, executive director of the voluntary effort of organized medicine and hospitals to curb costs, declared. The professions are achieving their goal of reducing by 2% each year the percentage of cost rise.

In 1976 hospital costs increased by 19.7%. In 1977 the rate of increase was pared to 15.6%. And for the first quarter of 1978 the rate of increase was only about 13%.

There have been more mergers, more sharing of services, a slowing of expanding hospital personnel. And the average length of stay—7.4 days in recent years—has been reduced to 7.2. In national terms this represents a substantial saving.

The voluntary cost containing effort is a joint endeavor of the American Medical Association, American Hospital Association and Federation of American Hospitals, with the cooperation of such other groups as Blue Cross-Blue Shield and the Health Insurance Association of America.

William M. Cohan, representative of the AMA on the steering committee, declared that the cost containing campaign has been aimed substantially at the chiefs of medical staffs of each hospital in the nation, who have been asked to institute cost control measures in their hospitals.

Doctors, who order patients into hospitals, who prescribe treatment, who order surgery, who order x-rays and lab tests are already cooperating in the drive to hold down the escalation of costs by voluntary means.

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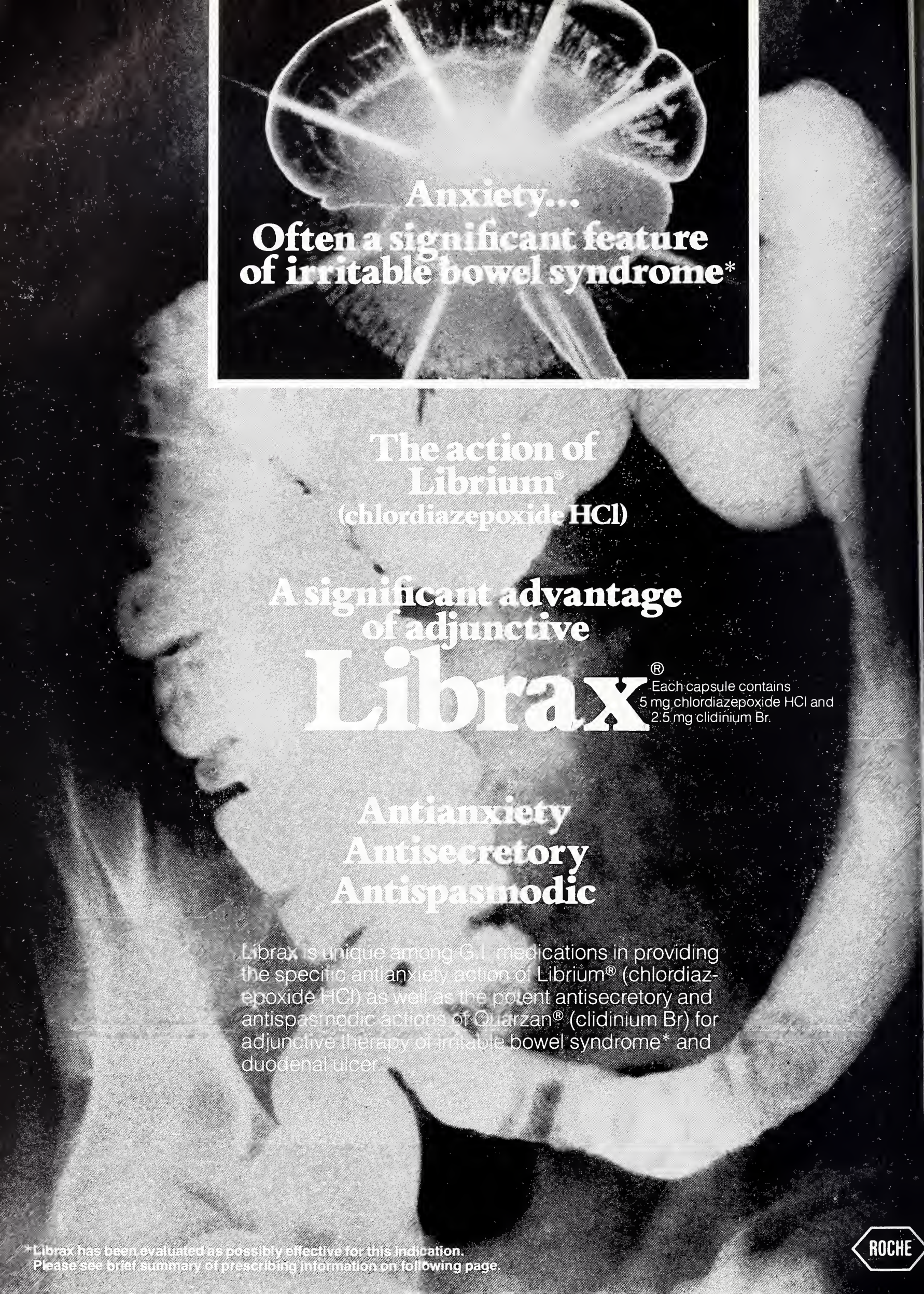
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ROCHE

Treatment of Pulmonary Tuberculosis: State of the Art, 1978

H. R. ANDERSON, M.D.

Effective treatment of the first tuberculosis patient with streptomycin in November of 1944, and the subsequent development and availability of other specific antituberculous medications, have brought about dramatic change in the management of tuberculosis. The days of prolonged sanitorial care, "temporary" and permanent collapse procedures and resective surgery for tuberculosis have been gradually phased out. These changes did not occur overnight. Treatment with specific medication, sanitorial care, bedrest, collapse and resective surgical procedures coexisted in various combinations for years, in spite of dramatic demonstration of the effectiveness of increasing numbers of antituberculous medications. There are currently 11 antituberculous medications used with some degree of frequency in the United States, some clearly more effective and less toxic than others. We now rely most heavily on two of the early drugs—streptomycin and isoniazid (INH)—and two drugs of more recent availability—ethambutol and rifampin.

The treatment of tuberculosis has been, or can be, returned to the mainstream of medicine. Primary care physicians should now be competent, or develop competence, to treat tuberculous patients. True, there are instances in which physicians with specialized interest and skill in managing pulmonary disease may need to be involved in diagnosis and establishing treatment regimens in the unusual or drug-resistant cases, but these cases are relatively uncommon. Once the diagnosis and treatment regimen is established, it should be possible and is indeed preferable for the patient

to be returned to the primary care physician who is responsible for the patient's general medical care.

Although drugs were and are important, other key observations have made it possible to treat many patients entirely as outpatients or in a general hospital for brief periods, followed by outpatient treatment. Wier¹ and his group at Fitzsimons General Hospital, in the 1950s demonstrated that patients taking appropriate antituberculous medication, once over their acute symptoms, did not require bedrest to assure a satisfactory response. The work of Riley and others^{2,3} made possible better understanding of the transmission of the disease by aerosol droplet nuclei produced by the "coughing" patient, and demonstrated that infectiousness promptly abated in patients soon after the institution of specific antituberculous medication. In 1968, Corpe⁴ reported that after an appropriate course of antituberculous medication, the surgical resection of residual cavitory lesions was not usually required. As these three observations and others demonstrate, the effectiveness of modern chemotherapy has made prolonged hospitalization unnecessary and, in fact, undesirable. These observations have also made possible the closure of most tuberculosis hospitals across the nation. Outpatient treatment programs have been developed that make treatment possible entirely on an outpatient basis or following brief hospitalization in an appropriately equipped and staffed general hospital.

The treatment of tuberculosis today primarily involves the institution and maintenance of therapy with appropriate antituberculous drugs. Standards established by the Center for Disease Control indicate that sputum should become negative by

From the Division of Tuberculosis Control, Tennessee Department of Public Health, and from the Tennessee Thoracic Society.

PULMONARY TUBERCULOSIS/Anderson

culture within three months in 75% of cases, and within six months in 95%, and that "cure" should occur in 95%. Table 1 lists the currently available antituberculous medications, methods of administration, suggested dosage, toxicity associated with administration, and methods to be used in monitoring patients receiving these drugs.

The following general statements and comments should be helpful for physicians with infrequent involvement in the treatment of tuberculosis patients:

- Isoniazid and rifampin are considered bactericidal drugs and a combination of streptomycin and pyrazinamide is considered a bactericidal combination. The other drugs are considered bacteriostatic.
- Selection of which drugs, the number to be used and the duration of administration, should be determined on the basis of the extent of the disease, whether or not the patient has had antituberculous drug therapy before, and whether there are drug-resistant organisms, coexistent disease, or socioeconomic problems.
- Ideally, all patients with bacteriologically positive disease should have treatment instituted with at least two antituberculous drugs to which the organisms are sensitive; one should be a bactericidal agent or combination. Examples of such combinations are (1) isoniazid and rifampin, (2) isoniazid and ethambutol.
- In re-treatment cases, until or unless results of sensitivity studies are known, patients should be started on drugs they have not previously received and, in the initial stages of the treatment, should receive three or more drugs concurrently.
- Except in rare instances, it is not necessary to give the daily medication in divided doses. In fact, it is preferable in most instances to give all drugs in total daily amounts together in the morning on an empty stomach.
- The duration of treatment should depend on the amount of disease, the response to treatment and whether or not treatment is initial or re-treatment. The regimen and duration of treatment, therefore, should vary. The following are examples of appropriate regimens: (1) Two drugs for six months followed by one drug, usually isoniazid, for an additional 6 to 12 months for patients with previously untreated minimal to moderately advanced disease is usually adequate. (2) Patients with more extensive disease, resistant

organisms, or who have had previous treatment are frequently treated with three or more drugs for six weeks to six months, and depending upon response, the agents are discontinued one at a time until the patient completes an 18- to 24-month course of drug therapy.

- Duration of treatment is becoming progressively shorter. The British Medical Research Council⁵ has indicated that intensive treatment programs of six months are adequate in most cases, especially if isoniazid and rifampin are used. Studies of this nature are occurring in this country but at this time short-course treatment regimens are not in general use or recommended by the Center for Disease Control.
- Patients who have been receiving antituberculous medication and who appear to have a failing regimen should never have new antituberculous medication added one at a time since it is likely that resistance to the new agent would promptly develop. At least two drugs not previously used or to which the organisms are known to be sensitive should be added.

The following should be *avoided* when possible:

- More than one of the injectable aminoglycosides administered at the same time.
- Administration of drugs that have similar toxic effects when used in combination.
- Administration of drugs excreted, in large part, by the kidney in patients with impaired renal function.
- Administration of potentially hepatotoxic drugs in combination in older patients, alcoholic patients and those with a history of liver pathology or known hepatic dysfunction associated with antituberculous drugs in the past.

Contrary to previous policy it is

- Not usually necessary to have a patient remain away from work and school or avoid social activities for long periods of time while awaiting multiple negative sputum cultures. Patients who develop negative smears and, in some cases, even those who demonstrate a decrease in the number of organisms on direct smear may usually return to their previous activities so long as they continue uninterrupted their antituberculous medication under supervision.⁶
- Unnecessary to evaluate tuberculosis patients annually or at any given period once they have completed a satisfactory course of drug treatment. These patients should be told that their treatment is completed; that they are discharged and are

TABLE 1

TREATMENT OF MYCOBACTERIAL DISEASE IN ADULTS AND CHILDREN
FROM OFFICIAL STATEMENT OF AMERICAN THORACIC SOCIETY ADOPTED OCT. 16, 1976*

First-Line Drugs	Dosage**		Most Common Side Effects**	Tests for Side Effects**	Remarks**
	Daily	Twice Weekly			
Isoniazid	5-10 mg/kg up to 300 mg PO or IM	15 mg/kg PO or IM	Peripheral neuritis, hepatitis, hypersensitivity	SGOT/SGPT (not as a routine)	Bactericidal. Pyridoxine 10 mg as prophylaxis for neuritis; 50-100 mg as treatment
Ethambutol	15-25 mg/kg PO	50 mg/kg PO	Optic neuritis (reversible with discontinuation of drug; very rare at 15 mg/kg) skin rash	Red-green color discrimination and visual acuity†	Use with caution with renal disease or when eye testing is not feasible
Rifampin	10-20 mg/kg up to 600 mg PO	Not recommended	Hepatitis, febrile reaction, purpura (rare)	SGOT/SGPT (not as a routine)	Bactericidal. Orange urine color. Negates effect of birth control pills
Streptomycin	15-20 mg/kg up to 1 gm IM	25-30 mg/kg	8th nerve damage, nephrotoxicity	Vestibular function, audiograms;† BUN and creatinine	Use with caution in older patients or those with renal disease
Second-Line Drugs					
Viomycin	15-30 mg/kg up to 1 gm IM		Auditory toxicity, nephrotoxicity, vestibular toxicity (rare)	Vestibular function, audiograms;† BUN and creatinine	Use with caution in older patients. Rarely used with renal disease
Capreomycin	15-30 mg/kg up to 1 gm IM		8th nerve damage, nephrotoxicity	Vestibular function, audiograms;† BUN and creatinine	Use with caution in older patients. Rarely used with renal disease
Kanamycin	15-30 mg/kg up to 1 gm IM		Auditory toxicity, nephrotoxicity, vestibular toxicity (rare)	Vestibular function, audiograms;† BUN and creatinine	Use with caution in older patients. Rarely used with renal disease
Ethionamide	15-30 mg/kg up to 1 gm PO		GI disturbance, hepatotoxicity, hypersensitivity	SGOT/SGPT	Divided dose may help GI side effects
Pyrazinamide	15-30 mg/kg up to 2 gm PO		Hyperuricemia, hepatotoxicity	Uric acid, SGOT/SGPT	Combination with an aminoglycoside is bactericidal
Para-aminosalicylic acid (aminosalicylic acid)	150 mg/kg up to 12 gm PO		GI disturbance, hypersensitivity, hepatotoxicity, sodium load	SGOT/SGPT	GI side effects very frequent making cooperation difficult
Cycloserine	10-20 mg/kg up to 1 gm PO		Psychosis, personality changes, convulsions, rash	Psychologic testing	Very difficult drug to use. Side effects may be blocked by pyridoxine, ataractic agents or anti-convulsant drugs

* Reprinted from *American Review of Respiratory Disease*, vol. 115, no 1, January 1977.

** Check product labeling for detailed information on dose, contraindications, drug interaction, adverse reactions and monitoring.

† Initial levels should be determined on start of treatment.

PULMONARY TUBERCULOSIS/Anderson


to return only if they develop persistent pulmonary symptoms.⁷

The problems that patients with tuberculosis present now that make their treatment and cure difficult are usually problems that are not directly related to tuberculosis as such but are due to social, economic, or complicating medical-surgical conditions.

It should be realized there will continue to be cases of tuberculosis (hopefully, in decreasing numbers) for years as a result of the pool of 15 million Americans who have been infected with tuberculosis earlier in life and who may experience breakdown of the disease as they grow older and/or develop diseases or conditions that predispose to the activation of latent asymptomatic infection. These individuals, of course, can usually be identified before their breakdown by the demonstration of a positive tuberculin test, and many of them can be prevented from developing overt disease by the use of isoniazid, 300 mg/day for the adult or an appropriately smaller dose for children for one year.⁸

Primary care physicians should have a high index of suspicion for individuals with pulmonary

tuberculosis so they can recognize and treat them. It should be realized that tuberculosis can occur at any age, but that it is now largely a disease of those over 45 years of age, and that most cases are a result of endogenous breakdown of previously existing latent infection rather than a new infection occurring from exogenous exposure.

In the "Public Health Report" in this issue there is a list of services provided by the Health Department available to tuberculosis and tuberculosis-suspect patients and the sites to which patients may be referred for the services. 

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SEVENTY YEARS AGO—

(The following item is reproduced from the *Texas State Journal of Medicine*, vol. 4, p. 119, Sept. 1908.)

The Journal of the Tennessee State Medical Association began to be issued in June [1908]. Unfortunately, we have not seen the first two copies, but the August number is a very neatly printed, creditable little journal. The page is a 6 x 9 issue, and it contains only one advertisement—that of a medical college. It is filled with original papers and other discussions, with the exception of three pages of editorials which are modestly placed at the back of the journal. We are glad to welcome the *Tennessee Journal* into the family of medical publications devoted exclusively to the interests of the medical profession, and feel sure that it will prove of immense value to the Tennessee State Medical Association.

Modern Principles of Blood Transfusion Therapy

CHARLES H. WALLAS, M.D.; ADELISA L. PANLILIO, M.D.;
and DAVID E. JENKINS, JR., M.D.

Throughout recorded history, man has always had great interest in and fascination with blood. Until relatively recently this interest was based on proposed mystical qualities of blood. Indeed the first attempts at clinical use of blood were based on these presumed mystical qualities rather than on the physiological considerations which hopefully underlie modern blood transfusion therapy.¹

It is now recognized that blood is a very complex fluid containing both cellular elements (red cells, white cells, and platelets) and plasma, the source of albumin, coagulation factors, antibodies, and many other proteins. With advances in technology, it has become increasingly possible to separate blood into its various components, permitting the physician to choose the appropriate component for his patient, while leaving the other portions of the collected blood unit to be used for clinical needs of other patients. Before describing the various components of blood and plasma derivatives now available for transfusion therapy, it is worthwhile to consider the changes which occur in blood during conventional storage at 4 C. It is important to understand these in order for the physician to choose properly the blood products needed for the individual patient.

Changes in Blood with Storage

Under normal circumstances, one unit (450 ml to 500 ml) of blood is collected into 63 ml of citrate-phosphate-dextrose (CPD) solution which serves both as an anticoagulant and as a nutrient for red cells during storage. Using CPD anticoagulant, storage of whole blood and red cells for up to 21 days at 4 C is presently permitted by federal regulations. Addition of adenine to CPD allows for an even longer storage time.

From the Departments of Pathology and Medicine, Vanderbilt University School of Medicine and the Nashville Regional Red Cross Blood Program, Nashville.

The opinions and assertions are those of the authors and do not necessarily bear relationship to the policies or views of the American Red Cross.

Within the next few years, extension of the shelf life of blood to 35 days is expected when CPD-adenine is approved for routine use in blood banking.²

Many changes occur in whole blood during storage at 4 C. These changes include alterations in cellular viability and function, alterations in coagulation factor levels, and accumulations of potassium, ammonia and microaggregates. Each of these changes will be discussed separately.

Red Cell Changes: During storage in CPD solution, red cell viability decreases approximately 1% per day resulting in an 80% survival at 21 days. Twenty-one-day-old blood is acceptable for the transfusion needs of virtually all patients with the possible exception of patients with bone marrow hypofunction requiring chronic transfusion. For these patients, blood less than seven days old should probably be used when available to minimize transfusion requirements and thereby reduce iron overload. Changes in oxygen affinity also occur with storage. Loss of 2-3 diphosphoglycerate (2-3 DPG) activity with storage results in a greater *in vitro* affinity for oxygen by red cells.^{3,4} This change does not occur until after seven days of storage and is minimal even at 21 days in blood stored in CPD. Rapid correction occurs within 6 to 24 hours following transfusion.^{3,4} Furthermore, the clinical implications of this *in vitro* change in 2-3 DPG are not known. Patients massively transfused with blood near 21 days old do not demonstrate clinical problems with oxygen delivery. Other compensatory mechanisms appear to exist permitting adequate oxygen delivery *in vivo* despite reduction in measurable 2-3 DPG.⁵

White Cells: The number of granulocytes in a unit of whole blood is insufficient to raise the white cell count of the recipient. In addition, granulocyte function and viability decrease rapidly after 24 to 48 hours of storage. Thus whole blood is not a suitable source of white cells for transfusion. Utilizing pheresis techniques for collection of granulocytes from single donors per-

mits collection of granulocytes in sufficient amounts for transfusion usages.⁶

Platelets: Each unit of whole blood contains approximately 1×10^{11} platelets immediately after collection. This number of platelets would raise the platelet count in an average adult by 10,000 to 20,000/cu mm. During storage at 4 C, platelets rapidly deteriorate. Only 10% to 25% of the original platelets are viable at 24 hours. This loss in viability accounts for the drop in platelet count which may occur in massive transfused patients. It also explains why platelet concentrates rather than whole blood are necessary for the treatment of thrombocytopenia.

Clotting Factors: All clotting factors with the exception of factors V and VIII are stable up to 21 days in whole blood, and even factors V and VIII may be reasonably well maintained. Levels of factor V of 25% of normal and factor VIII up to 50% of normal have been reported in plasma obtained from 21-day-old blood.⁷ Consequently massive transfusions even of 21-day-old blood should not produce a significant abnormality in clotting protein levels unless concomitant liver disease or disseminated intravascular coagulation is present. Thus the practice advocated by some of giving one unit of fresh blood or fresh frozen plasma for every four units of bank blood does not seem warranted. If apparent bleeding abnormalities develop in patients being massively transfused, appropriate laboratory tests should be used to determine the blood products needed. The prothrombin time and the partial thromboplastin time can be used to assess the status of clotting factors, the platelet count to monitor platelet levels.

Potassium and Ammonia: Although potassium and ammonia levels progressively increase in bank blood and represent potential risks to patients with renal or liver disease respectively, these two parameters do not significantly increase until after three to five days of storage at 4 C.^{8,9} In addition, since these substances accumulate in the plasma, it is possible to pack even 21-day-old whole blood immediately prior to transfusion and remove the potassium and ammonia. Alternately, older units of blood can be washed to remove excessive potassium and ammonia. Consequently, it is not necessary to use freshly drawn blood for patients who have renal or hepatic disease in order to avoid the problem of potassium and ammonia accumulation in bank blood.

Microaggregates: Microaggregates, which are collections of fibrin, platelets and white cells, progressively increase in blood stored at 4 C and pass through conventional 170 μ blood filters. Although implicated in shock lung, their clinical significance has not been established.^{10, 11} However, it is still appropriate to avoid microaggregates by utilizing microaggregate filters rather than by utilizing freshly drawn whole blood in patients with lung disease or in patients being massively transfused.

Preparation of Blood Components

The single most important principle underlying modern transfusion therapy is the utilization of blood components. The rationale behind component therapy is a simple one—to prepare as many blood products as possible from each unit of blood collected. This permits maximum recovery of blood products from donated units of blood, providing increased services to a wider variety of patients. Not only are more patients served, but individual patients are served better. They receive only the components they need and not other components which might in fact be harmful to them.

Two requirements exist for the utilization of this modern approach to transfusion therapy. One is the technical capability to prepare components. The other is greater medical awareness of the principles of component therapy. Over the past 10 or 15 years, technical capability for producing blood components has increased rapidly. Perhaps the single most important technical advance permitting greater production of components is the collection of blood into plastic bags rather than glass bottles. These plastic bags can be manufactured together in multiple closed bag systems, enabling blood components to be moved between bags without the risk of bacterial contamination.

Table 1 reviews the variety of blood products available depending on the type of collection bags used. If blood is collected into a single pack, only one product, whole blood, is produced. As double, triple and quad packs are utilized, the variety of components and derivatives progressively increases. Based on this approach, it becomes clear that the availability of virtually all components depends on the production and utilization of packed cells. Usually not stressed in this regard is the fact that utilization of packed cells by the physician is just as important as the technology involved in component production

since a blood collecting facility is required to make whole blood unnecessarily if physicians demand whole blood in circumstances where packed cells could be used.

Usage of Blood Components

Application of modern principles of blood transfusion therapy makes it mandatory that physicians understand the concepts of blood component therapy and apply them to their practices both for the benefit of their own patients as well as for other patients. It must be recognized by all that donated human blood is an irreplaceable

clinical commodity. The medical profession has the obligation to utilize this limited resource donated in good faith in the most prudent manner possible. Listed below is an analysis of the various blood components available. It should be noted that we have included whole blood in the list of blood components. By extending the concept of blood component therapy to its fullest, whole blood becomes one of several blood components available for use in appropriate clinical situations. The storage characteristics and clinical indications for use of various components and derivatives of blood are summarized in Table 2.

TABLE 1
PRODUCTION OF BLOOD COMPONENTS BASED ON THE USE OF MULTIPLE-BAG COLLECTION SYSTEMS

Collection Bag	Component/Product*	Derivatives†
Single Pack	Whole Blood	
Double Pack	Packed Red Cells Fresh Frozen Plasma (FFP)	Factor VIII conc. Factor IX conc. PPF‡/albumin Gamma globulin
Triple Pack	Packed Red Cells Platelets Fresh Frozen Plasma (FFP) or Packed Red Cells Cryoprecipitate "Cryo-poor" FFP	Same as for double pack Factor IX conc. PPF‡/albumin Gamma globulin
Quad Pack	Packed Red Cells Platelets Cryoprecipitate "Cryo-poor" FFP	Factor IX conc. PPF‡/albumin Gamma globulin

*Components are products produced by physical means, usually by a combination of centrifugation and transfer of products between compartments of multiple-bag systems.

†Derivatives are products manufactured from plasma. Derivative preparation usually involves chemical separation or fractionation of plasma into its derivatives.

‡PPF—plasma protein fraction.

TABLE 2
CHARACTERISTICS AND CLINICAL INDICATIONS FOR USE OF BLOOD COMPONENTS AND PLASMA DERIVATIVES

Product	Storage Characteristics	Indications
Whole Blood	1-6 C, 21 days	Treatment of acute blood loss; replace first two units with packed cells.
Packed Cells	1-6 C, 21 days	RBC replacement therapy.
Fresh Frozen Plasma	-18 C, 1 year	Clotting factor replacement based on laboratory testing; immunoglobulin replacement.
Platelet Concentrate	22 C, 72 hours	Platelet replacement based on laboratory testing.
Cryoprecipitate	-18 C, 1 year	Factor I, VIII, XIII replacement based on laboratory testing.
Factor VIII Concentrate	1-6 C, 3 years	Factor VIII replacement based on laboratory testing.
Factor IX Concentrate	1-6 C, 3 years	Factor II, VII, IX, X replacement based on laboratory testing.

Whole Blood: As Table 2 indicates, the major indication for the use of whole blood is in the treatment of acute blood loss. In this regard, patients can lose up to 1,000 ml of blood during surgery and do quite well without blood replacement¹²⁻¹⁴ although most physicians elect to replace the amount of blood lost by the patient. When replacing blood during surgery (or acute blood loss of other types), it is no more hazardous to replace the first two units with packed cells than with whole blood and to use whole blood thereafter for replacement therapy. By using this approach, it is possible for the blood collection center to prepare components from 70% to 90% of the units collected thereby greatly expanding the patient services provided per unit of blood collected.¹⁵

Fresh Whole Blood: At times this has been one of the most misunderstood and misused of the available blood components. Knowledge of the changes of blood with storage plus newer technology have reduced the valid indications for the use of fresh whole blood. As reviewed earlier, red cell viability and *in vivo* oxygen delivery remain well preserved during 4 C storage. Plasma coagulation factors hold up reasonably well under similar conditions and extremely well in fresh frozen plasma. As indicated, fresh blood is not an adequate source of granulocytes. Rather pheresis products should be used for this purpose when indicated.⁶

Neither is fresh blood a practical source of platelets. Processing of blood (including hepatitis testing) requires a minimum of 6 to 18 hours prior to release. Blood must be kept at 4 C during processing. Therefore platelet viability is reduced even with the freshest blood routinely available for safe usage in transfusions. Thus for platelet replacement therapy, platelet concentrate or platelets collected by pheresis⁶ are the preferred and necessary product rather than fresh whole blood. Potential problems with potassium, ammonia and microaggregates no longer represent an absolute indication for fresh whole blood. These potential problems can be compensated for by using techniques described in an earlier section.

Alternatives to Whole Blood and Fresh Whole Blood: This has in many ways been covered already. Some authors have presented data to indicate that we could actually reduce the amount of blood products used during surgery when

blood loss is relatively low.¹²⁻¹⁴ If blood replacement becomes necessary, the first two units should be packed cells with volume compensation being provided by salt solutions. Problems with flow rates of packed cells and ways to overcome these are discussed below. After the first two units of replacement with packed cells, whole blood can be utilized if necessary. If massive replacement is necessary and whole blood is not available, packed cells plus a volume expander provide an adequate means of treatment of hypovolemia. Salt solutions, plasma protein fraction, and albumin can also be used for emergency volume replacement, although these substances do not contain coagulation proteins, so that plasma will be required for massive replacement.

Packed cells combined with fresh frozen plasma and platelet concentrates provide a very satisfactory replacement for fresh whole blood. Logistically it is much easier to prepare and maintain an adequate inventory of these products than to collect and process fresh whole blood quickly enough to meet emergencies. It requires several hours to locate donors, collect blood, and then safely process the blood (including hepatitis testing) even under emergency situations. Thus one of the benefits of component therapy is to have available a combination of products which are probably superior to fresh whole blood in terms of meeting the problems for which fresh whole blood is often requested.

Packed Red Cells: Proper usage of packed red cells is the cornerstone of modern blood component therapy. Certainly it is mandatory that packed cells and *not* whole blood be used for elective red blood cell replacement. Use of whole blood in chronically anemic (and therefore not hypovolemic) patients greatly increases the cardiovascular risk to the patient and can result in fulminant pulmonary edema. Use of packed cells as the first two units replaced in surgery or acute blood loss greatly increases the number of packed cells which the blood collection facility can prepare. With proper employment of principles of blood component therapy, it is possible for blood collection centers to prepare up to 70% to 90% packed cells from units collected.¹⁵ As indicated, this greatly expands the number of blood products available from collected donor units.

One practical problem may develop with the use of packed cells, especially if rapid flow rates are required as in acute blood loss. The flow rate may be slow due to the high hematocrit of

packed cells. This may be compensated for by adding 100 to 200 ml of normal saline to the unit through a Y infusion set immediately before infusion. **CAUTION:** Other crystalloid solutions should not be used. Glucose produces agglutination and may hemolyze red cells. Lactated Ringer's solution contains calcium and may cause clot formation in the unit.

Fresh Frozen Plasma (FFP): This product can be utilized to treat a variety of clinical disorders including hereditary or acquired coagulation factor deficiencies and immunoglobulin deficiency.

All hereditary clotting factor deficiencies can be treated with FFP although factor concentrates, when available, may be preferable since they avoid the problem of volume overload which can be potentially produced by large volume FFP infusion. With this in mind, FFP is especially useful for treating hereditary deficiencies of factor V and factor XI since concentrates to treat these deficiencies are not currently available. Although FFP can be utilized to treat patients with fibrinogen deficiency, cryoprecipitate, which is rich in fibrinogen, is preferable in terms of volume considerations.

FFP should also be used for patients with severe liver disease who develop bleeding in association with multiple factor deficiency. If the patient is not bleeding but has an abnormality of the prothrombin time and a liver biopsy is planned, one approach is to give the patient FFP if the prothrombin time is greater than 1.6 X control. In such instances transfusion of FFP (10 to 20 ml/kg body weight) over a six-hour period will usually temporarily correct the abnormal laboratory parameters but may also produce volume overload.

Transfusion of FFP has also been advocated for patients with disseminated intravascular coagulation (DIC) to replace consumed factors. It has also been proposed that FFP therapy be utilized to replace antithrombin III which is often consumed in DIC and is critical for heparin effect. Thus, in patients with DIC who appear to be heparin resistant, FFP replacement may be additionally useful in terms of restoring heparin sensitivity in such patients.

FFP has recently been used to replace immunoglobulins in patients with hereditary or acquired immunoglobulin deficiency states.¹⁶ FFP, in addition to being less painful to administer than immune serum globulin (ISG), contains all immunoglobulins as opposed to ISG which contains high levels of IgG but generally lacks the

other immunoglobulins.¹⁷ In order to diminish the hepatitis risk inherent in FFP, it is preferable to identify a few donors to serve as the sole suppliers of FFP for chronic usage in an individual with immunodeficiency states.

In contrast to defined indications for FFP in liver disease, DIC, and immunoglobulin deficiency states, transfusion of FFP is rarely necessary in patients undergoing cardiopulmonary bypass¹⁸ and is essentially never indicated in patients receiving massive transfusions unless the patient has liver disease or develops a disseminated intravascular coagulation.

Platelet Concentrates: Before discussing the efficacy of platelet transfusions, it is important to consider the indications for platelet transfusions. Harker and Slichter¹⁹ have shown that as the platelet count drops below 100,000/cu mm, prolongation in the bleeding time begins to appear. Risk of spontaneous bleeding does not become significant until the platelet count drops below 20,000/cu mm. Even a platelet count of <20,000 is not in itself an absolute indication for prophylactic platelet therapy. Some physicians caring for patients with chronic thrombocytopenia do not employ platelet therapy prophylactically unless the platelet count is less than 5,000/cu mm. Part of the reason for this caution is using prophylactic platelet transfusion is that platelet therapy quickly produces immunization, as will be discussed. Therefore, platelets are best used for treating bleeding and not for prophylactic use unless the count is extremely low. Excessive bleeding in a patient with a platelet count of <50,000 or with a known platelet function defect probably constitutes an indication for platelet transfusions. Thrombocytopenia alone does not constitute an indication for platelet transfusions. To illustrate, platelet counts of 50,000 to 100,000 are frequently seen in patients following cardiopulmonary bypass.^{18, 20} Only rarely does this produce bleeding requiring platelet transfusions.

The number of units of platelets required by an individual patient can be estimated in one of several ways. One way is to estimate the increment in platelet count per cu mm produced by each unit of platelets using the formula:

$$\frac{5 \times 10^7}{\text{Patient blood volume (ml)}}$$

Based on similar calculation, Becker²¹ states that the usual dose can be calculated by dividing the patients weight in kilograms by 10. Thus a 70-kg patient should receive seven units of platelets, a

100-kg patient ten units, etc.

Doses estimated by calculations such as these are idealized ones since splenomegaly, fever, bleeding, or consumptive states (DIC or platelet antibodies) may significantly lower or completely abolish any expected increment in platelet count. In this regard, repetitive pooled random donor platelet transfusions will ultimately induce the production of HLA antibodies resulting in platelet destruction.²² These antibodies not only result in platelet destruction, such that platelet increments are no longer seen following platelet transfusion, but also may produce significant short-term granulocytopenia which might increase the risk of infection in a patient who already has a diminished white count due to marrow suppression or infiltration.²³ Although some blood centers are attempting to delay the appearance of a refractory state to platelet transfusions by providing nonmatched single-donor platelets and selectively sensitizing the recipient, ultimately, single-donor (related or nonrelated) HLA compatible platelets will have to be transfused.²⁴ These can be drawn from donors completely HLA matched with the recipient, although a recent study has suggested that it is as acceptable to utilize donors with cross-reactive (similar) antigens, thereby increasing the number of available suitable donors.²²

Several potential problems relate to the production and storage of platelet concentrates. First, although platelet concentrates may be contaminated with RBCs during processing, transfusion of ABO-incompatible platelets usually does not produce a problem in the recipient because of the small number of red cells present in the concentrates. In addition, it does not appear that ABO mismatching affects platelet survival in the recipient. A more significant problem related to the red cell contamination is that if platelets from an Rh positive donor are given to an Rh negative recipient, Rh sensitization can occur.²⁵ This can be prevented by treating the recipient of such transfusions with Rh₀(D) immune globulin.

Secondly, because of patterns of blood collection, most blood-collecting facilities produce mainly group O and group A platelets. In terms of transfusing platelets, group O platelets are given to group O and B recipients and group A platelets to group A and AB recipients. Again in terms of red cell contamination, this does not represent a problem. However, in a recipient with a small

blood volume, especially one who is receiving repetitive incompatible plasma transfusions associated with platelet therapy (approximately 50 ml plasma/platelet concentrate), it is appropriate to pack the platelet concentrates following pooling and remove 50% to 75% of the plasma *immediately* prior to transfusing the patient in order to avoid development in the recipient of a positive direct antiglobulin test and shortened red cell survival.

Platelets are stored conventionally at 22 C instead of 4 C in order to maintain platelet viability, which is markedly diminished by 4 C storage. Although originally of concern, it appears that if strict precautions are taken during preparation of these concentrates, the risk of bacterial growth is minimal.²⁶

Factor VIII Preparations: Factor VIII preparations include cryoprecipitate and factor VIII concentrates. Advantages of cryoprecipitate include the low hepatitis risk due to its being a single-donor product. The presence of multiple clotting factors makes it a more versatile product. Factor VIII concentrate on the other hand can be stored in a refrigerator and is easier to reconstitute than cryoprecipitate, making it a much more convenient product for home therapy of factor VIII deficiency. Table 3 presents a comparison of the two products.

For treating patients with factor VIII deficiency, the number (n) of units (bags) of cryoprecipitate that must be given is a function of the patient's plasma volume (PV), factor VIII units per bag of cryoprecipitate (approximately 100), and the factor VIII level desired. Thus for a patient with a 1,000 ml PV and severe factor VIII deficiency (0% activity) for whom 0.5 units/ml (50% activity) is desired, it is necessary to give five bags of cryoprecipitate:

$$\frac{100n}{PV} = \text{final units/ml}$$

Since the half life of infused factor VIII

TABLE 3
CHARACTERISTICS OF FACTOR VIII PREPARATIONS

	Cryoprecipitate	Concentrate
Donor	Single	Multiple
Processing	Cold precipitation	Fractionation
Storage	-18 C, 1 year	1-6 C, 3 years
Potency, factor VIII	100 units/bag	Assayed
Other factors	Fibrinogen, XIII, von Willebrand's factor	None

is 8 to 12 hours, it is necessary to give half the original dose of factor VIII every 8 to 12 hours in order to maintain 50% activity. To confirm that this activity has been attained factor VIII assays can be performed periodically during therapy. An identical calculation is used for determining the number of vials of factor VIII concentrate to be used for a given patient except that the units per vial, which is marked on each bottle of factor VIII concentrate, should be substituted for 100 in the formula used for cryoprecipitate calculation.

For treating patients with fibrinogen deficiency, a similar approach to calculating the dose is utilized based on the assumption that there are approximately 200 mg of fibrinogen in each bag of cryoprecipitate. Thus for a patient with a PV of 1,000 ml, it is necessary to give five units of cryoprecipitate to increase the fibrinogen 100 mg/dl:

$$\frac{200n}{PV/100} = \text{final mg/dl}$$

A potential complication of factor VIII therapy relates to the observation that patients receiving intensive high-dose factor VIII therapy may develop a positive direct antiglobulin test and hemolysis because factor VIII concentrates contain anti-A and anti-B antibodies which are fractionated along with the factor VIII molecule.²⁷ Consequently, in any factor VIII-deficient patient other than a group O individual, care must be taken if the patient is treated for five to seven days with high-dose therapy. If a patient on factor VIII concentrate therapy develops this problem, it is readily remedied by utilizing cryoprecipitate which does not contain significant amounts of anti-A and anti-B antibodies since essentially all the plasma has been removed during processing of the product. If RBC replacement becomes necessary, group O packed cells should be used.

Factor IX Concentrates: Even though factor IX concentrates contain the vitamin K-dependent factors II, VII, IX and X, they are most commonly used to treat patients with factor IX deficiency since deficiencies of II, VII and X are uncommon. Although these concentrates usually contain approximately 30 units per ml of factor IX, there are some preparations which have high potency (approximately 100 units per ml) and are devoid of factor VII. Dosage is calculated as with factor VIII replacement based on the PV of the recipient and the number of units of factor IX in each vial.

Since factor IX therapy is associated with a high risk of hepatitis transmission, this product should be reserved for patients with hereditary factor deficiencies or for patients with factor VIII antibodies (see below) and should never be used to treat vitamin K deficiency states or bleeding due to coumarin in drug overdose. If bleeding is brisk with acquired vitamin K-dependent factor deficiency, demanding immediate therapy, FFP infusion is the treatment of choice. In addition, factor IX concentrates should not be given to patients with severe liver disease because of the risk of development of thrombosis at the injection site or a disseminated intravascular coagulation state due to the presence of activated factors II, VII, IX and X in the concentrate. These activated factors are normally inactivated by the liver following transfusion but are not completely inactivated in patients with severe liver disease, initiating a severe thrombotic state. Although the presence of activated factors in factor IX concentrates is hazardous to patients with liver disease, their presence (especially activated factor X) has been of therapeutic benefit to patients with factor VIII deficiency who develop factor VIII antibodies. Presumably the presence of activated factor X, which is distal to the factor VIII dependent step in the clotting cascade, allows the patient to produce fibrin without depending upon factor VIII activation.

Summary

The single most important aspect of modern blood transfusion therapy is the application of principles of blood component therapy. Using this approach the individual patient receives the component or components needed, leaving other portions of collected units to be used for other patients.

Two major requirements must be met to achieve this modern approach to transfusion therapy. One is the technical capability to prepare components. The other is physician awareness of the principles of blood component therapy. Most blood collection facilities now possess the technical capabilities to prepare components from a high percentage of collected units. In order that this be accomplished, the individual physician must use packed cells rather than whole blood wherever possible. This practice is just as important as the technology involved since the collection facility must make whole blood available unnecessarily if physicians demand whole blood in circumstances where packed cells could be

used.

Utilizing the principles of blood component therapy, the maximum number of products can be prepared from collected units of blood, providing increased benefits to a wide variety of patients. Such an approach is mandatory if we are to achieve maximum utilization of an irreplaceable and limited clinical commodity—donated human blood.

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Brief Summary of Prescribing Information Combined TEGOPEN® (cloxacillin sodium)

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Indications: Although the principal indication for cloxacillin sodium is in the treatment of infections due to penicillinase-producing staphylococci, it may be used to initiate therapy in such patients in whom a staphylococcal infection is suspected. (See Important Note below.)

Bacteriologic studies to determine the causative organisms and their sensitivity to cloxacillin sodium should be performed.

Important Note: When it is judged necessary that treatment be initiated before definitive culture and sensitivity results are known, the choice of cloxacillin sodium should take into consideration the fact that it has been shown to be effective only in the treatment of infections caused by pneumococci, Group A beta-hemolytic streptococci, and penicillin G-resistant and penicillin G-sensitive staphylococci. If the bacteriology report later indicates the infection is due to an organism other than a penicillin G-resistant staphylococcus sensitive to cloxacillin sodium, the physician is advised to continue therapy with a drug other than cloxacillin sodium or any other penicillinase-resistant semi-synthetic penicillin.

Recent studies have reported that the percentage of staphylococcal isolates resistant to penicillin G outside the hospital is increasing, approximating the high percentage of resistant staphylococcal isolates found in the hospital. For this reason, it is recommended that a penicillinase-resistant penicillin be used as initial therapy for any suspected staphylococcal infection until culture and sensitivity results are known.

Cloxacillin sodium is a compound that acts through a mechanism similar to that of methicillin against penicillin G-resistant staphylococci. Strains of staphylococci resistant to methicillin have existed in nature and it is known that the number of these strains reported has been increasing. Such strains of staphylococci have been capable of producing serious disease, in some instances resulting in fatality. Because of this, there is concern that widespread use of the penicillinase-resistant penicillins may result in the appearance of an increasing number of staphylococcal strains which are resistant to these penicillins.

Methicillin-resistant strains are almost always resistant to all other penicillinase-resistant penicillins (cross-resistance with cephalosporin derivatives also occurs frequently). Resistance to any penicillinase-resistant penicillin should be interpreted as evidence of clinical resistance to all, in spite of the fact that minor variations in *in vitro* sensitivity may be encountered when more than one penicillinase-resistant penicillin is tested against the same strain of staphylococcus.

Contraindications: A history of a previous hypersensitivity reaction to any of the penicillins is a contraindication.

Warning: Serious and occasionally fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin therapy. Although anaphylaxis is more frequent following parenteral therapy it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with a history of sensitivity to multiple allergens.

There have been well documented reports of individuals with a history of penicillin hypersensitivity reactions who have experienced severe hypersensitivity reactions when treated with a cephalosporin. Before therapy with a penicillin, careful inquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins, and other allergens. If an allergic reaction occurs, the drug should be discontinued and the patient treated with the usual agents, e.g., pressor amines, antihistamines, and corticosteroids.

Safety for use in pregnancy has not been established.

Precautions: The possibility of the occurrence of superinfections with mycotic organisms or other pathogens should be kept in mind when using this compound, as with other antibiotics. If superinfection occurs during therapy, appropriate measures should be taken.

As with any potent drug, periodic assessment of organ system function, including renal, hepatic, and hematopoietic, should be made during long-term therapy.

Adverse Reactions: Gastrointestinal disturbances, such as nausea, epigastric discomfort, flatulence, and loose stools, have been noted by some patients. Mildly elevated SGOT levels (less than 100 units) have been reported in a few patients for whom pretherapeutic determinations were not made. Skin rashes and allergic symptoms, including wheezing and sneezing, have occasionally been encountered. Eosinophilia, with or without overt allergic manifestations, has been noted in some patients during therapy.

Usual Dosage: Adults: 250 mg. q.6h.

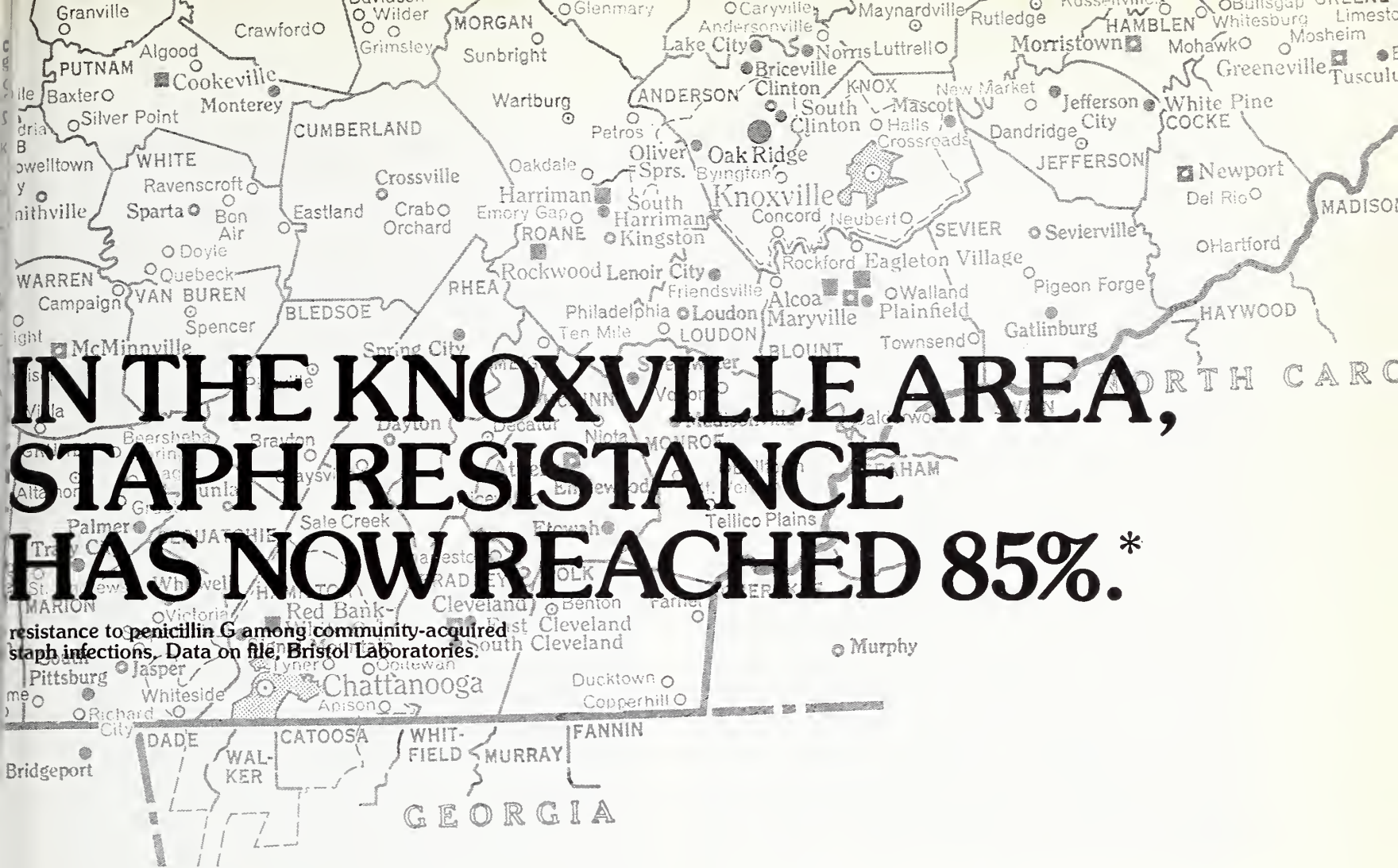
Children: 50 mg./Kg./day in equally divided doses q.6h. Children weighing more than 20 Kg. should be given the adult dose. Administer on empty stomach for maximum absorption.

N.B.: INFECTIONS CAUSED BY GROUP A BETA-HEMOLYTIC STREPTOCOCCI SHOULD BE TREATED FOR AT LEAST 10 DAYS TO HELP PREVENT THE OCCURRENCE OF ACUTE RHEUMATIC FEVER OR ACUTE GLOMERULONEPHRITIS.

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Clinical Presentations in Sarcoidosis

ROBERT L. JACKSON, M.D. and JOSEPH M. STINSON, M.D.

Introduction

Sarcoidosis is a multisystem disease of unknown etiology, characterized by formation of noncaseating granulomas^{1, 2} and originally described as a dermatologic disease. The greater frequency of lung and other organ involvement was not recognized until the early part of this century.³ The disease is most common in black residents of the Southern states, and clinical severity varies considerably in different geographic locations.⁴ These factors, plus the varying extent of multiple organ involvement, cause such patients to present to many different medical specialists, and the primary care physician must consider sarcoidosis when confronted with a myriad of symptoms.⁵ The present study was designed to evaluate clinical presentations of sarcoidosis in a predominantly black hospital in a Southern state.

Methods

All medical records of Hubbard Hospital coded as sarcoidosis for the years 1965 to 1976 were reviewed. As a cross-check, records were examined of all patients listed in the radiological files as sarcoidosis or "consistent with sarcoidosis." Presenting symptoms and initial physical findings were recorded, as were laboratory results, skin test results, and means of diagnosis and therapy. Initial chest roentgenograms of all patients were reviewed and classified after the method of Sharma⁵ as follows: stage 0, normal chest film; stage I, hilar adenopathy with or without associated paratracheal adenopathy; stage II, hilar adenopathy plus parenchymal lesions; stage III, parenchymal lesions without adenopathy; and stage IV, pulmonary fibrosis.

Results

Twenty-one patients were women and seven men, with ages ranging from 18 to 67 with a mean age of 37 years at the time of diagnosis. Nineteen were native Tennesseans, three were

born in Alabama, and the remainder were natives of six other Southeastern states.

Presenting symptoms and signs are shown in Table 1. While respiratory manifestations were most common, significant numbers of patients had constitutional symptoms as well. None of the findings were specific for sarcoidosis.

Roentgenographic stages of intrathoracic disease are presented in Table 2. Hilar adenopathy (stages I and II) was present in 64% of the patients, and two patients had normal chest x-rays. Thus, the more serious stages III and IV were present in only a minority of patients. All of the latter were treated with oral corticosteroids (prednisone or methylprednisolone), as were two patients with stage II disease. One patient had a small unilateral pleural effusion which was not aspirated, and another had right upper lobe atelectasis. Therapy resulted in reexpansion as the size of hilar nodes regressed. Only two patients had x-ray evidence of punched out or cystic lesions of the digits.

TABLE 1
PRESENTING FEATURES

Cough	18
Productive	12
Nonproductive	6
Dyspnea	15
Chest pain	13
Fever	9
Malaise	9
Weight loss	9
Rales	9
Wheezes	8
Anorexia	6
Hemoptysis	4
Visual changes	4
Arthralgia	3
Peripheral nodes	3
Digital clubbing	2
Parotid swelling	1
Abdominal pain	1
Myalgia	1
Cutaneous lesions	1
Dizziness	1
Asymptomatic	1

TABLE 2
RADIOGRAPHIC STAGES

Stage 0	2
Stage I	12
Stage II	6
Stage III	3
Stage IV	5

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Skin test results are tabulated in Table 3 and demonstrate significant anergy to tuberculin and histoplasmin. Notes of a Kveim test were found in only one chart, and the result was not recorded. Significant laboratory findings included eosinophilia (4% or more of WBC count) in nine patients, hypercalcemia (over 10.5 mg%) in five, and leukopenia (2,600 WBC/cu mm) in one. None of the patients had hyperglobulinemia. Table 4 lists biopsy sites. Biopsy was used primarily for histologic examination. Only in very recent years were tissues cultured for mycobacteria and fungi.

Discussion

This study illustrates the protean manifestations of sarcoidosis, any of which might be the reason for a patient presenting to his primary physician. This contrasts with the suggestion that the general physician is most likely to see the sarcoid patient with fever, lymphadenopathy, arthritis or parotid enlargement.^{5, 6} Although the list of presenting features is extensive (Table 1), there are no specific clinical characteristics of sarcoidosis. Thus with often vague respiratory or other symptoms, the primary physician must consider the possibility of sarcoidosis and order chest x-rays. This is especially true when such symptoms fail to clear after appropriate symptomatic therapy for a reasonable period of time.

The suggestion has been made that bilateral hilar adenopathy alone is adequate indication for a diagnosis of sarcoidosis,⁷ although most writers insist on going further than the chest x-ray to arrive at a diagnosis.⁸ The principal diseases which must be considered in the differential diagnosis are tuberculosis, fungal infections, and lymphomas.⁸ Even bronchogenic carcinoma has been reported as a cause of bilateral enlargement of the hilar lymph nodes.⁹ Thus every effort

should be made to determine a specific etiology for roentgenographic findings. Sputum should be collected and examined for *Mycobacterium tuberculosis*, fungi, and exfoliated malignant cells. Skin tests may be helpful in an inferential way since delayed type hypersensitivity may be depressed in 70% or more of patients.⁴ Definitive diagnosis of sarcoidosis, however, requires tissue demonstration of noncaseating granulomas with negative cultures for acid-fast bacilli and fungi, and the biopsy must be examined carefully for evidence of neoplasia. Sarcoidosis is thus a diagnosis of exclusion.

Skin lesions are most accessible for biopsy and this is usually an office procedure; however, such lesions are present in only a small percentage of these patients (Table 1). The primary approach for tissue diagnosis is currently transbronchial biopsy through the fiberoptic bronchoscope.¹⁰ Even in the absence of discernible parenchymal lesions on chest films such biopsies are often diagnostic and have largely relegated scalene node biopsy to a secondary status. Rarely, mediastinoscopy or open lung biopsy may be required.

Summary

A series of 28 patients with biopsy-proven sarcoidosis is reviewed. Patients were predominantly young women with protean nonspecific respiratory and few systemic symptoms. Ten patients were treated with corticosteroids. Based on these findings and those in the literature, an approach to diagnosis is presented which is designed to rule out similar diseases of known etiology for which therapy is markedly different.

Acknowledgements:

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TABLE 3
SKIN TESTS

	Positive	Negative
Tuberculin	3	20
Histoplasmin	2	16
Coccidioidin	0	3
Mumps	1	2

TABLE 4
BIOPSY SITES

Scalene node	19
Bronchoscopy	4
Lung	2
Mediastinoscopy	1
Liver	1

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Hypopigmented Sarcoidosis

MAJ. JAMES W. PATTERSON, MC, USA, and MAJ. JAMES E. FITZWATER, MC, USA

Patients with sarcoidosis frequently manifest cutaneous lesions. Most series demonstrate cutaneous findings in 30% of patients,¹⁻³ excluding the frequently seen erythema nodosum. Plaques, lesions in scars, maculopapular eruptions, lupus pernio, cutaneous and subcutaneous nodules, and diffuse erythema represent the most common skin disorders. Such unusual findings as ulceration, psoriasiform plaques, and cicatricial alopecia have also been reported.² Another form of cutaneous sarcoid, seen especially in blacks, is hypopigmentation, which has been described often enough³⁻⁷ that it must now be considered a well-established, if uncommon, cutaneous manifestation of sarcoidosis.

This case report documents another example of sarcoidosis in which hypopigmentation is a prominent feature. It also points out that hypopigmented lesions may represent the first clinical sign of the disease, thereby permitting early diagnosis and therapy.

Report of a Case

A 43-year-old black woman presented to the dermatology clinic in September 1976 because of a gradually enlarging white patch on the right cheek and a new, smaller lesion on the left cheek.

According to her history, she was referred to the Rockefeller Institute in 1957 because of abnormalities found on a routine chest film. The diagnosis of sarcoidosis was made at that time, based on the following data: (1) on physical examination, prominent adenopathy in the anterior cervical, supraclavicular, axillary, inguinal, and femoral regions, and liver palpable 3 cm below the right costal margin; (2) laboratory values including 3,500 WBC and erythrocyte sedimentation rate of 54 mm/hr; (3) chest x-ray, showing a mottled infiltrate in both bases, large hilar and paratracheal nodes and a markedly enlarged superior mediastinum; (4) three Kveim tests, which produced sarcoidal reactions; and (5) a scalene node biopsy consistent with sarcoidosis. Management consisted of one year of isoniazid at 250 mg/day and close medical follow-up. By 1959 her condition was stable, with regression of lymphadenopathy and no new x-ray findings. Since that



Figure 1. Hypopigmentation involving the right cheek. Note the sharply demarcated border.

time she has remained relatively asymptomatic except for occasional dyspnea on exertion.

The patient first noted a white patch on her right cheek during her early teens, and it had become progressively larger since then. It was first mentioned in a 1965 ophthalmology note, and was termed a "birthmark." In 1966 it was reported as "vitiligo, gradually enlarging," but no biopsy was performed.

Physical examination in September 1976 was unremarkable except for a hypopigmented plaque involving most of the right side of the face (Fig. 1), and several smaller but similar lesions on the left mandibular region. The lesions had an indurated quality distinctly different from that of neighboring normal skin. Light touch and pinprick sensation were normal in the involved areas. A potassium hydroxide preparation of skin scrapings was negative, and no growth was obtained on fungal culture. Laboratory values, including complete blood count and differential, urinalysis, T3 and T4, and serum chemistry screen were within normal limits. The RPR was nonreactive. The erythrocyte sedimentation rate was 47 mm/hr. Chest x-ray findings were consistent with sarcoidosis, with no changes from previous films.

A two-month trial of a topical fluorinated steroid was unsuccessful in reducing the induration and had no effect on the hypopigmentation. Punch biopsy of the lesion was performed.

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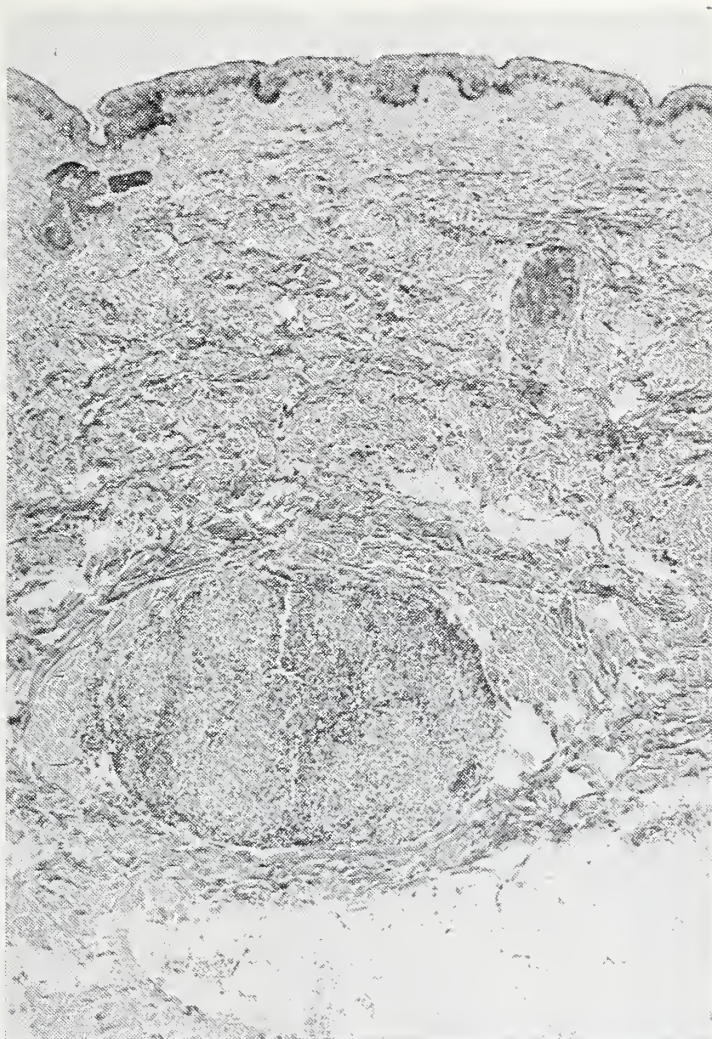


Figure 2. A full thickness biopsy reveals the presence of a "naked tubercle" typical of sarcoidosis at the juncture of deep dermis and subcutaneous fat (hematoxylin-eosin, X63).

Histopathology

The original biopsy material (Fig. 2) revealed epithelioid granulomata involving the reticular dermis and subcutaneous fat. Special stains (periodic acid-Schiff, Gomori methenamine silver, acid fast and Wilder reticulum) failed to reveal the presence of organisms, and polariscopic examination was negative for foreign bodies. The granulomata were characteristic "naked tubercles" with very little peripheral mononuclear cell infiltrate. The epithelium overlying the lesions was unremarkable; specifically, there was no abnormality of the basal layer (Fig. 3). The biopsy material was characteristic of a cutaneous manifestation of sarcoidosis.

Subsequently, a second set of biopsies was performed. This material consisted of punch biopsies of affected and unaffected skin. There was no significant difference in light microscopic studies between the lesional epidermis (specifically the amount and distribution of pigmented cells) and that of the unaffected area.

Comment

This woman exhibits the characteristic lesions

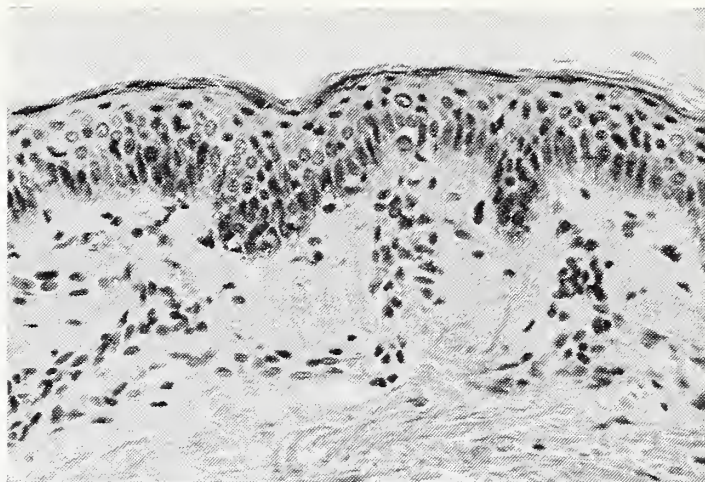


Figure 3. The epidermis overlying the granuloma seen in Figure 2 demonstrates an unremarkable basal layer (hematoxylin-eosin, X250).

of hypopigmented sarcoidosis. It is clear from the history that the gradually expanding hypopigmented plaque was first noted during her early teen years, at least eight years before the positive chest x-ray that led to the diagnostic workup. Although the skin biopsy was not obtained until 1976, it appears probable that this lesion was the first clinical sign of sarcoidosis.

In a 1963 study of 145 patients with sarcoidosis, Mayock et al³ found that 37% had associated skin lesions. Of these, eight were found to have hypopigmentation and depigmentation, but there was no detailed description of lesion morphology, nor were histologic examinations performed. In 1973, Cornelius et al⁴ described the gross and microscopic findings in four patients with hypopigmentation and sarcoidosis. Lesions were described as macular, though sometimes showing induration or an underlying papular component. Histopathology revealed sarcoidal tubercles in the dermis and an overlying epidermis of rather unremarkable appearance with hematoxylin and eosin stain. DOPA (dihydroxyphenylalanine) incubation of sodium bromide-separated epidermal sheets revealed equivalent melanocyte counts in normal and abnormal skin. However, with the Fontana stain, silver granules (denoting the presence of melanin) were found to be sparse in the malpighian and horny layers in involved skin, while abundant at the same levels in normal skin. Subsequent light microscopic studies have been relatively consistent in this regard, demonstrating little difference between normal and abnormal epidermis except for sparsity of silver granules⁷ or "more even distribution" of granules⁶ in the epidermis of involved skin.

An advance in our understanding of this hypopigmentation phenomenon was made by Clayton et al⁶ in an electron microscopic study of two of

their eight patients with hypopigmented sarcoidosis. Among the melanocyte abnormalities they observed were dilated rough endoplasmic reticulum, increased number and degeneration of mitochondria, cytoplasmic vacuolization, and the presence of only fully melanized melanosomes in the most severely altered cells. These are non-specific changes which are seen in a variety of other hypopigmenting disorders such as leprosy, tinea versicolor, and the pigmented margins of vitiligo. The additional finding of dilated lymphatics at the epidermal-dermal junction (seen in one case only on electron microscopy) led these authors to postulate a circulatory disturbance with alteration of cell nutrition, resulting in changes in melanocytes and clinical hypopigmentation. The precise mechanism of the diminished pigmentation, however, remains to be elucidated.

Treatment of hypopigmented sarcoid lesions has thus far been disappointing. Topical fluorinated steroids were unsuccessful in our case and did not influence the pigmentation in another,⁴ although nodularity was diminished. Normally, one would expect that topical steroids would tend to promote hypopigmentation, though the precise reason for this is not understood.⁸ However, it was hoped that the anti-inflammatory properties of the topical steroid might supersede any direct depigmenting effect (at least in the long term) by suppressing the underlying granulomatous process. Perhaps more extensive trials of topical corticosteroids will eventually prove this to be an effective form of therapy. Antimalarials have been used in one case,⁷ with reported reduction in the size of granulomas, but the effects on the hypopigmentation per se were not described. One

patient with depressed cell-mediated immunity has shown repigmentation of macular lesions after treatment with transfer factor.⁶ The use of topical or oral psoralens and long wave ultraviolet light for the purpose of promoting repigmentation in these cases is another possibility worthy of exploration.

Hypopigmented sarcoidosis has been observed and described often enough that it can no longer be considered simply a dermatologic curiosity. On the contrary, it is an important clinical sign which should be recognized by any physician who from time to time may be faced with the protean manifestations of this disease. As is true of the other specific cutaneous lesions of sarcoidosis, biopsy of a hypopigmented lesion may provide a convenient and relatively low-risk means of making a diagnosis. In addition, as suggested by this case report, hypopigmentation may represent the first clinical manifestation of sarcoidosis, and therefore its recognition permits both early diagnosis and the institution of prompt medical management.

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"You are in excellent shape for a man of sixty-five. What a pity you're only forty!"

Simultaneous Infectious Mononucleosis and Scarlet Fever

CHARLES E. KOSSMANN, M.D., Editor

DENNIS K. LEDFORD, M.D.:

A 14-year-old white male was in good health with no previous serious illnesses, and specifically no previous streptococcal pharyngitis, hepatitis, or infectious mononucleosis. There was no exposure to cats or dogs at home. He had rubella as a child.

Approximately five to six days before the first admission on Nov. 13, 1977, constitutional complaints began, primarily headache, decreased appetite, and aches and pains in the extremities. Three or four days later a sore throat was noted, described as severe, and accompanied by chilly feelings and fever. One day later a red rash was noted first on the neck, forearms and palms, becoming confluent as it spread to the face and torso. On Nov. 19, 1977, the patient was admitted to the hospital.

Physical examination revealed a toxic-appearing, adolescent white male with a generalized scarlatiniform rash. The oropharynx was injected and the swollen tonsils were covered with a yellow exudate. There were no abnormalities of the heart or joints. The spleen was questionably enlarged.

A differential diagnosis of scarlet fever from infectious mononucleosis was entertained. Scarlet fever seemed the more likely from the appearance of the rash and a culture of hemolytic streptococci from the throat.

He was treated with benzathine penicillin G (Bicillin) and discharged six days later at a time when the skin was beginning to desquamate. At home there was little change for approximately one week but then sore throat and fever recurred and the patient was readmitted to the hospital on Dec. 1, 1977.

A comparison of the objective findings on the two admissions is pertinent (Table 1). The temperatures were about the same. On each admission, but more particularly on the first, there was an exudative pharyngitis. The cardiovascular examination revealed no evidence of carditis on either. The spleen became definitely palpable sometime between admissions. The lesion in the skin was described as a sandpaper-like, erythematous, papillary rash initially, and as confluence developed on the face it displayed circumoral pallor; on the second admission, it was desquamative. The lymph nodes, palpable on both admissions, were larger and more tender on the second.

A comparison of the laboratory data (Table 1) caused some confusion at first relative to the precise diagnosis. The white blood cell count was 4,700/cu mm with 30% lymphocytes of which only 1% or 2% were atypical.

On the second admission the atypical lymphocytes increased in relative and absolute numbers. The throat culture initially displayed numerous colonies of hemolytic streptococci; after penicillin therapy there was a normal flora. The unabsorbed heterophile agglutinins occurred in a titer of 1:112; after guinea pig kidney cell absorption it was 1:28 and after beef cell absorption 1:56. Eleven days later these three titers became 1:896, 1:224, and 1:7 respectively. The monospot test was negative initially, positive later. The ASLO titer behaved in a reverse manner going from 1:250 to 1:50. The anti-DNAase titer rose from negative to 1:250 μ /ml. The erythrocyte sedimentation rate was increased fivefold by the time of the second admission.

The impression at the time of the initial discharge from the hospital was that the patient had infectious mononucleosis based primarily on the absence of entirely convincing titers of streptococcal enzymes. However, there was a positive streptococcal throat culture so that an additional diagnosis of streptococcal pharyngitis was made. From the desquamative rash, atypical for mononucleosis, it was felt that the patient had definite scarlet fever as well.

On the readmission he was treated only symptomatically and became afebrile spontaneously in three days.

The patient was seen in the clinic one week after he was discharged the second time and was well. The throat was clearing, the spleen had decreased in size, and the white blood cell count was 6,200/cu mm of which 22% were lymphocytes.

GENE H. STOLLERMAN, M.D.

This is a nice case for me to discuss because usually I am called upon to make the differential diagnosis between streptococcal sore throat and infectious mononucleosis, a not uncommon problem. Here, I can make the diagnosis of both.

Causes of Exudative Pharyngitis

There are only a few bacterial diseases that cause frank exudative pharyngitis in man. The group A streptococci can produce primary invasion of the throat and an exudative pharyngitis. Diphtheria can cause it but more frequently it is characterized by a pseudomembrane often involving the entire upper respiratory tract including the trachea. Gonococcal organisms, of course, can produce a tonsillitis, and in the right setting one should think of this. But for practical pur-

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City of Memphis Hospital Case #629130. Presented Jan. 4, 1978.

TABLE 1

COMPARISON OF OBJECTIVE DATA
ON THE TWO ADMISSIONS

	First Admission	Second Admission
Temperature	100.3 F	100.8 F
EENT	Oral petechiae Tonsillitis, exudative	Erythematous pharynx Tonsillitis, exudative
Abdomen	Negative	Splenomegaly
Skin	Erythematous with confluence Circumoral pallor	Desquamation
Lymph nodes	Posterior cervical, R>L	Anterior and posterior cervical, R>L
WBC	4,700—N 58, B 10, M 2, L 30 (1-2 atypical)	9,700—N 44, B 3, E 2, M 4, L 47 (10-15 atypical)
Throat culture	<i>S. hemolyticus</i> Group A	Normal flora
Heterophile absorption	1:112	1:896
GPB absorption	1:28	1:224
Beef cell absorption	1:56	1:7
Monospot test	Negative	Positive
ASLO titer	<1:250	1:50
Streptozyme	<1:100	1:100
Anti-DNAase	Negative	1:280
ESR	15	78

poses there is only one bacterium that commonly produces an exudative pharyngitis and that is the group A streptococcus.

Several viruses can produce a pharyngitis that cannot be distinguished from a group A streptococcal lesion. One of these is the virus that causes infectious mononucleosis, the Epstein-Barr virus. Adenovirus may also produce an exudative pharyngitis. Classically, infectious mononucleosis produces not only an exudative pharyngitis but often a necrotizing pharyngitis. The virus of infectious mononucleosis loves the tonsils and the pharynx, which indeed are its route of entry into the body because the disease is spread by saliva infected with shed virus. About 20% of those who have had infectious mononucleosis, and that is most of us, shed the virus in saliva thereafter. For this reason infectious mononucleosis is known as "the kissing disease," is often spread by the oral route, and usually presents as a very sore throat. In some instances, however, it does not, and if the pharyngitis is subclinical or mild, the typical, nondescript systemic syndrome of infectious mononucleosis occurs. There will be fever, enlarged posterior cervical and sometimes suboccipital nodes as well as generalized lymphadenopathy, all easily confused with rubella, cytomegaloviral infection, hepatitis B, and secondary syphilis, to

name but a few parasitemias. In fact syphilis must be ruled out routinely, especially in young people, because the age group that gets infectious mononucleosis from kissing also gets syphilis from other love-making activities and syphilis is easily curable at this stage with one injection of benzathine penicillin G.

If there is a severe enough infection of the throat in infectious mononucleosis, a flagrant exudative pharyngitis will be present. It is impossible to differentiate it from a streptococcal pharyngitis at its onset unless a careful history is obtained. In acute streptococcal pharyngitis there are brief prodromata, if any. It is a rapid-onset disease. Actually, systemic symptoms preceding the sore throat are rarely more than a few hours in duration. The incubation period is at most four to seven days. With infectious mononucleosis the incubation period is longer, about 10 to 20 days, and the prodromata of the disease go on for one to two weeks.

Multi-Infectious Diseases

This patient had scarlet fever followed by infectious mononucleosis; he was developing infectious mononucleosis throughout his whole course. Both diseases may have been contracted at the same time. After he was treated for scarlet fever,

the infectious mononucleosis continued to develop. Frequently the two diseases can coexist. In the days when we were trying to wipe out rheumatic fever and streptococcal infections from the U.S. Navy at the Great Lakes Naval Training Center, we had a ward that was called "the scarlet fever ward." It was also called "the rubella ward" and "the infectious mononucleosis ward" because the young sailors, mostly 18- and 19-year-olds, on returning from their first "shore leave," would often contract rubella, scarlet fever, infectious mononucleosis and not infrequently syphilis and gonorrhea as well, singly or in combination. It was hard to differentiate one from the other. Frequently rubella would coexist with scarlet fever and infectious mononucleosis. Diseases with similar modes of transmission have the potential of occurring simultaneously. However, there is an easy way to rule out one of these without any laboratory test at all—by therapeutic trial. Acute streptococcal pharyngitis always responds promptly to penicillin; the patient should feel better in less than 24 hours and should be entirely well within another day or two. Infectious mononucleosis, of course, will not respond.

Therapeutic Considerations

Some clinicians, for some strange reason, treat simple, uncomplicated sore throats with ampicillin. Why this practice is perpetrated on the human race I don't know. The offenders are often pediatricians who treat older children and adolescents the same as a newborn baby. They are conditioned to using ampicillin to prevent hemophilus meningitis or otitis media although there is no clear evidence that penicillin G therapy will not accomplish the same end just as well. If ampicillin is used in the treatment of a sore throat due to infectious mononucleosis, a rash will often appear within ten days. That will complicate the picture because a rash can occur in untreated infectious mononucleosis, in rubella, in syphilis, and with streptococcal infection if the bacterium makes erythrogenic toxin. Why does ampicillin cause a rash in infectious mononucleosis? I don't know nor, apparently, does anyone else. It does not, however, seem to be clearly related to allergy to known determinants of penicilloic acid or its derivatives.

It is my belief that this patient was treated for scarlet fever and that the sore throat caused by the scarlatinal streptococcus improved with penicillin but that the infectious mononucleosis didn't.

Serology

Serology was typical. Let's look at the serology of infectious mononucleosis in a little more detail. There are three heterophile antibodies that may be encountered in this disease—one is the Forssman, the second is the Paul-Bunnell, and the third is the Wassermann. The Forssman antigen is found in guinea pig kidney; the antibody is commonly produced in a variety of viral, malarial, syphilitic and other diseases. The antibody to beef cells, the Paul-Bunnell antibody, is the one produced specifically in infectious mononucleosis but the disease also produces a variety of other heterophile antibodies and autoantibodies. It is common in infectious mononucleosis to have all of them elevated and to get biologically false-positive reactions in serologic tests for syphilis. Therefore, when a sheep-cell agglutination is performed, it may be sky high and you have to decide by absorption what it means. If you absorb with the guinea pig kidney cells and the titer comes down to less than 1:28, the reaction is doubtful for infectious mononucleosis. If, however, it is above that level or subsequently rises above it, then you want to know if the titer is specific for beef cells. The beef cells should take out the remaining heterophile titer reducing it to zero. The tests, therefore, should be done sequentially. The one we now order as a screening test, because it is easy to do, is the monospot test. The reactants are sheep cells, and include guinea pig kidney cells and horse erythrocytes for absorption. If agglutination of the sheep red cells does not occur, you cannot rule out infectious mononucleosis with certainty because some 20% to 30% of the cases will be negative.

We now can demonstrate a variety of specific antibodies known to be caused by the Epstein-Barr virus. This virus infects B lymphocytes, not T lymphocytes. However, the atypical lymphocyte of infectious mononucleosis is not a B cell but a T cell which is undergoing transformation probably because it is destroying virus-infected B cells. How does it recognize the infected B cell? I am not quite sure that we know the full answer to that. We do know that the B cell may not be destroyed by the virus and B cells may be stimulated to proliferate. There may be an arrest of the viral cycle of replication. The membrane of the B cells undergoes an antigenic change forming what is now called the "lymphocyte detectable membrane antigen." That change in the membrane of the B cell apparently enables the T cell to recognize it and kill it. That seems to be how the

disease is controlled and why the patient recovers.

There are several viral antibodies that we can now recognize.¹ The Epstein-Barr virus antibody, produced against the virus itself, may be an IgM antibody which appears very early and then disappears. Later an IgG antibody is formed, provided IgG metabolism is normal, which remains elevated for life. The patient with infectious mononucleosis has a lot of other immunologic reactions going on. One is an antibody associated with early infection which is a response to another antigen in the virus; it rises and falls very quickly like the heterophile antibody to sheep cells. The IgM response to the Epstein-Barr virus capsid, now called the "antiviral capsid antigen," appears almost immediately. If a test for it is done early in infectious mononucleosis, presence of the disease can be established. If it is done late, i.e., beyond the first two weeks, the IgM antibody is gone but the IgG antibody, produced also in response to the viral capsid, remains and will be there forever. One cannot be sure, therefore, when the IgG antibody was acquired. It will be there forever because there develops a balance between infection and the host's defense. The patient becomes a carrier for the remainder of his life.

The antibodies that are most useful in plotting the course of the disease are the "early antibodies" to the Epstein-Barr virus which go up in the first week or two and then recede, and the Paul-Bunnell antibodies which parallel them in titer over a period of three to four weeks. The Paul-Bunnell antibodies are positive in only about 70% or 75% of cases so that one quarter of patients will be missed by the monospot test alone. For this reason it is useful to have available these other tests of antibodies against Epstein-Barr viral antigens.

Relation to Cancer

In the Dec. 17, 1977 issue of *Lancet*,² Epstein himself has an excellent review of the pathophysiology, clinical picture, and the clinical course of infectious mononucleosis. We can now fully understand the epidemiology and pathological physiology of the disease and maybe begin to understand how it produces cancer. The excitement of the Epstein-Barr virus is that it is one of the viruses that has been proven to produce cancer in the form of nasopharyngeal carcinoma, of Burkitt's lymphoma, and possibly of others.³ To recapitulate: Infection begins with kissing or by transmission of saliva. A sore throat syndrome results, in which there is viral infection of the B

cells in Waldeyer's ring, the lymphoid ring of the pharynx and tonsils. There may be a severe tonsillitis if the cytotoxic action of the virus causes death of the B cells. With viral replication, a lesion of the throat will be produced.

For some reason if the infected individual is a child, which is usually the age group affected in underdeveloped countries where sanitation is inadequate, not much of a clinical syndrome develops. A mild sore throat in the child may be the extent of it. In affluent societies where people are protected from early viral infections, the adolescent or adult who contracts the disease develops the full blown syndrome, which in addition to the sore throat, includes disseminated viremia with generalized lymphadenopathy, splenomegaly, hepatomegaly, and the well-known hematologic and immunologic concomitants. In the early stages it may not be differentiated with certainty from leukemia, tuberculosis, secondary syphilis, hepatitis-B, or from several other viremias. They all look alike. However, when dissemination of the virus occurs and the patient has fever, malaise, and adenopathy, B cells are infected and they begin to proliferate.

If the infected B cells are grown in culture, they proliferate and grow indefinitely in vitro. They have been called, therefore, "immortal lymphocytes." The virus not only has the capacity to make the B cells grow but also to change their membranes. A new antigen is produced that is recognized and attacked by killer T cells. When the T cells effectively kill off the infected B cells, the disease abates somewhere between two and six weeks after onset. But, it is not really over. There is, rather, a kind of armed truce between invader and host. Some infected B cells will persist but as long as healthy T cells are around they keep killing off potential offenders. Therefore, the patient has a balanced latent infection for the rest of his life.

With regard to cancer, a syndrome has been recently described in a couple of kindreds who have an X-linked, immunologic deficiency expressed in males as a lack of resistance to the Epstein-Barr virus.⁴ When the virus infects these people the B cells run amok and produce an American form of Burkitt's lymphoma, or a B-cell sarcoma, an overwhelming, fatal infectious mononucleosis. This experiment of nature demonstrates that a viral infection in a host who is genetically immunodeficient can lead to cancer. It is an exciting concept. In addition, it might explain why the children in Africa, overwhelmed

by malaria and in a sense thus immunosuppressed, may go on to get Burkitt's lymphoma when they are infected with the Epstein-Barr virus.

Conclusion

I want you to know all about infectious mononucleosis for many reasons. As clinicians you are all going to deal repeatedly with the difficult differential of diagnosis of sore throat.⁵ I don't want you to use ampicillin to treat simple sore throat; I don't want you to conclude that there are streptococcal infections resistant to penicillin just because the exudative pharyngitis did not respond to that antibiotic; and I want you to under-

stand about Paul-Bunnell antibodies and newer specific viral antigens. I also want you to recognize that this disease offers an exciting beginning of our insight into the etiology of cancer as it relates to viral infection.

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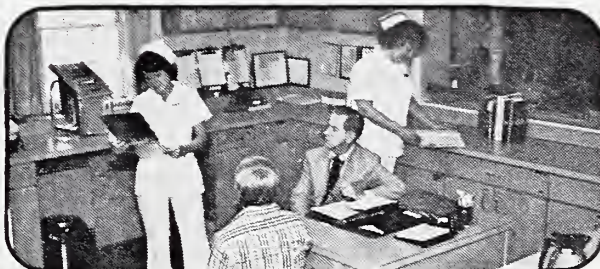


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X-Ray of the Month

A. JAMES GERLOCK, JR., M.D.

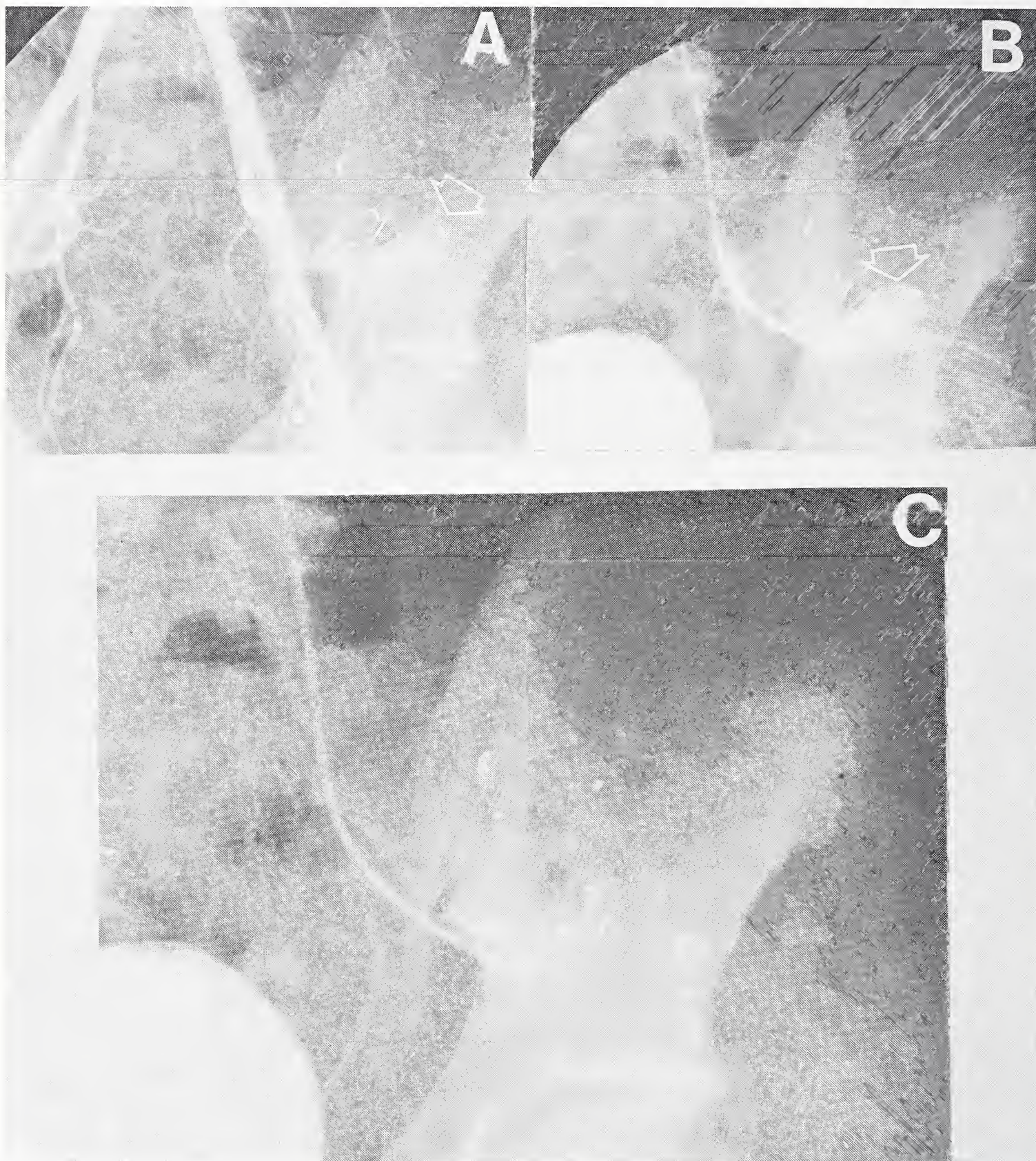


Figure 1. (A) Pelvic arteriogram shows bleeding from two traumatic aneurysms of left superior gluteal artery. (B) Catheter tip has been advanced subselectively into superior gluteal artery. Two traumatic aneurysms can now be well seen (arrows.) (C) Repeat angiogram with catheter tip still in superior gluteal artery. Note traumatic aneurysms are no longer seen.

From the Department of Radiology, Vanderbilt University Hospital, Nashville, TN 37232.

This 28-year-old man sustained a self-inflicted gunshot wound to the pelvis, for which he underwent an exploratory laparotomy, disclosing several perforations of the colon. These were corrected, but following the surgery his hematocrit continued to drop and blood oozed from the surgical wound. A pelvic arteriogram showed bleeding from two traumatic aneurysms of the left superior gluteal artery (Fig. 1A, arrows). Figure 1B shows the catheter tip has been advanced subselectively into the superior gluteal artery. The two traumatic aneurysms can now be well seen (arrows). Figure 1C is a repeat angiogram with the catheter tip still in the superior gluteal artery. Note the traumatic aneurysms are no longer seen. Which of the following explanations do you think accounts for their absence?

- (1) Rupture of the aneurysms by the catheter manipulations
- (2) Obliteration by transcatheter embolization technique
- (3) Obliteration of the aneurysms by transcatheter infusion of a vasoconstrictor drug
- (4) Obliteration by spontaneous arterial thrombosis

Discussion

This special therapeutic method consists of injecting embolic particles through the intra-arterial catheter in order to obtain specific vessel occlusions. An example of this would be the transcatheter particle embolic occlusion of bleeding vessels (inaccessible by surgery) in the management of pelvic hemorrhage following trauma.¹

The optimum management of pelvic hemorrhage following trauma to the pelvis remains a difficult and controversial problem. Seavers and associates² have recommended hypogastric artery ligation, but this procedure may fail even if both hypogastric arteries are ligated, because of the extensive network of collateral blood vessels which is present in and about the soft tissues and musculature of the pelvis.^{3,4} Fleming and Bowen⁵ advocate early exploration of pelvic hematomas only after the administration of eight units of blood. The risks of surgery are substantial in these patients, and exposure and identification of these bleeding vessels can be extremely difficult. Baylis and associates⁶ performed exploratory laparotomy in 25 patients with retroperitoneal hematoma and found the bleeding site in only one patient. Incising a retroperitoneum which contains a large hematoma can also destroy the tamponade, which may be the only effective force of hemostasis. Ravitch⁴

suggests withholding any direct control of bleeding until 20 units of blood have been administered. This form of treatment may, however, expose the patient to the complications of multiple blood transfusions. Ring and associates⁷ advocate the use of angiography early in the management of patients with evidence of continuing blood loss from pelvic trauma. By the use of arteriographic techniques, the bleeding point can not only be localized but stopped immediately by the use of intra-arterial embolic occlusion of these bleeding vessels. This will not only control pelvic hemorrhage early before massive extraperitoneal hematoma develops, but may make surgical exploration of the pelvis unnecessary.

Figure 1A-B shows multiple pseudoaneurysms of the superior gluteal artery in a patient following a gunshot wound to the pelvis. This patient was oozing blood from the cutaneous wounds about the pelvis. This bleeding subsequently stopped when the pseudoaneurysms of the superior gluteal artery were obliterated by the use of transcatheter intra-arterial embolization of Gelfoam performed immediately after the angiographic diagnosis of these pseudoaneurysms (Fig. 1C). Transcatheter embolization of bleeding vessels in pelvic trauma can be a useful therapeutic procedure which can make operative procedures unnecessary and prevent complications from massive blood transfusions by reducing blood loss.

Answer: Obliteration by transcatheter embolization technique.



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W. BARTON CAMPBELL, M.D.

A 45-year-old man entered with the complaint of increased fatigability and fever. He described dystaxia of two hours' duration which involved the left arm and left leg one month previously. He had ankylosing spondylitis but rheumatoid factor was not detectable. There was no history of peripheral joint involvement.

Two years previously aortic valve replacement with a #31 Hancock porcine valve had been carried out for aortic stenosis. There was mild aortic regurgitation but no aortic annular dilatation. Postoperatively the rhythm was atrial fibrillation with a ventricular rate of 60 to 70 per minute. He was not on digitalis, and he had not been seen at St. Thomas Hospital since his surgery.

Physical examination disclosed a somewhat irritable white man who looked his stated age of 45. Temperature was 99 F rectally and blood pressure was 130/80. His color was good. There was slight kyphosis with fixation of thoracic and cervical spine. Chest was clear to auscultation. Examination revealed no Roth's spots, Osler's nodes, Janeway lesions, splinter hemorrhages or petechiae. The spleen was not palpable. A grade I soft systolic murmur was present at the base of the heart, but no diastolic murmurs were audible and the apical first heart sound was of varying intensity. Occasional cannon A waves were visible in the jugular venous pulse, and an echocardiogram showed normal porcine aortic valve motion; the left ventricular size was normal. An electrocardiogram was obtained (Fig. 1).

The striking electrocardiographic finding is the lack of association between atrial and ventricular depolarization. P waves are readily identifiable and the atrial rate is 79 per minute. The PP interval is regular. The RR interval is also regular but is slower, at a rate of 58 per minute. Obviously, there is no relationship between P waves and QRS complexes, due in this situation (where the atrial rate is faster than the ventricular rate) to complete block in the atrioventricular conduction pathways.

Impairment of conduction of the atrial electrical impulse to the ventricle may be categorized. First degree block is merely prolongation of the PR interval in excess of .21 seconds. (This is to some degree rate dependent.) Second degree block is defined as occasional dropped beats, and therefore some P waves will not be followed by a QRS complex. With third degree block (complete AV block) no beats are conducted. In this case, the pacemaker for the ventricles must origi-

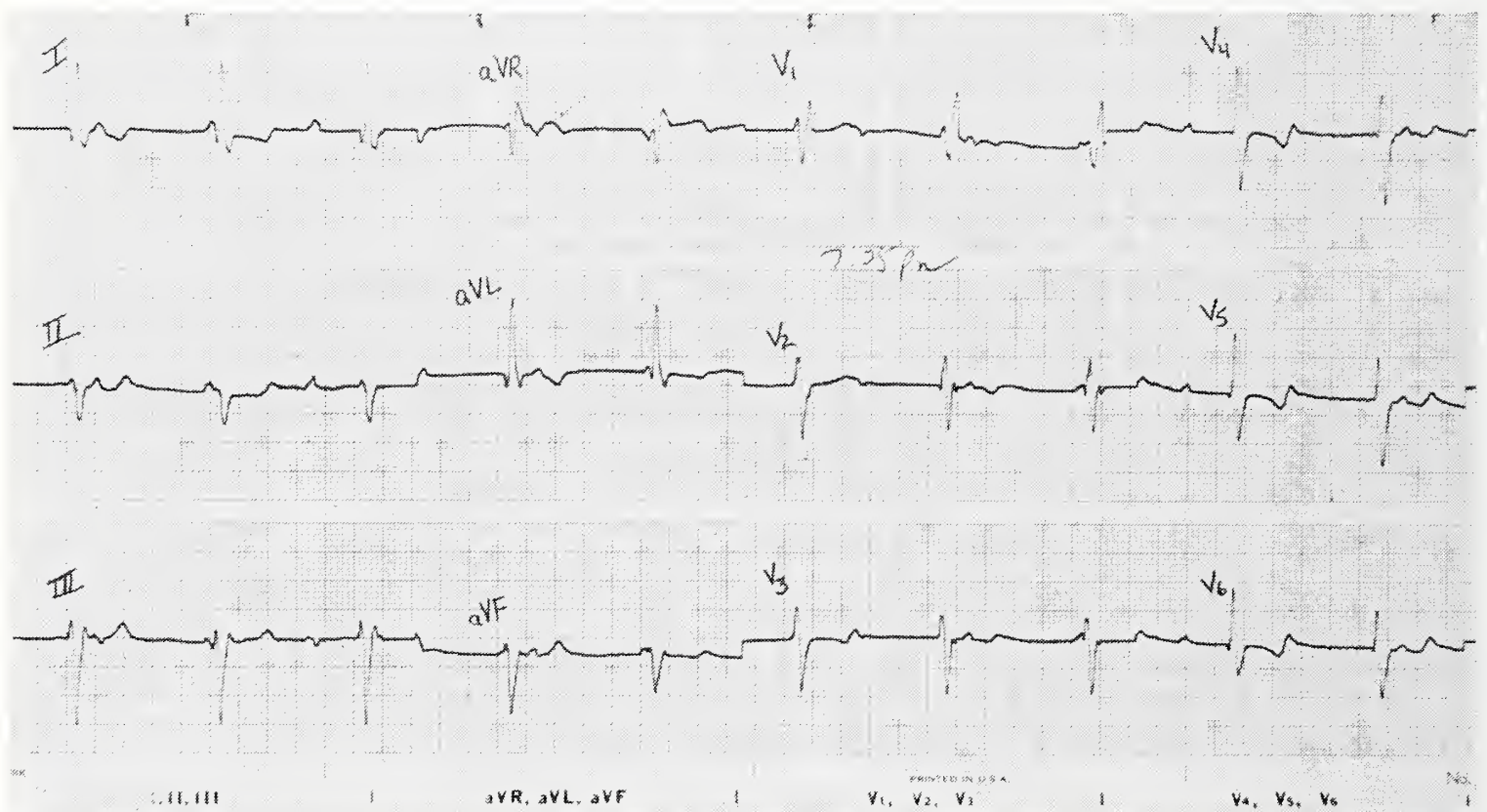


Figure 1

From the Department of Cardiology, St. Thomas Hospital, Box 380, Nashville, TN 37202.

nate below this block. Occasionally the QRS complex in third degree block is normal, usually

the result of the high pacemaker situated above the bifurcation of the His bundle. The presence of a wide QRS complex with an S wave in standard lead I and an R wave in V₁ (a right bundle branch block configuration) as in this case suggests that the pacemaker is located in the left ventricle. This accounts for the rightward and anterior orientation of the late QRS forces. ST changes are secondary to this abnormal depolarization.

Third degree block may be associated with increased fatigue or heart failure due to decreased cardiac output, and it may also be associated with angina pectoris. Stokes-Adams seizures have classically been related to third degree block (but may occur with other arrhythmias as well). Third degree block with a slow rate may of course be responsible for sudden death, as people who have third degree block with a more rapid ventricular rate are commonly asymptomatic and may require no treatment.

Clinical manifestations of third degree block (in addition to the slow pulse rate) include prominent cannon A waves and jugular venous pulse waves produced by contraction of the atria against a closed tricuspid valve. The first heart sound varies in intensity as the ventricles contract at various times following atrial contraction.

There are multiple causes of third degree block. This patient has ankylosing spondylitis which has been associated with His bundle degeneration (probably secondary to disease involving the artery to the AV node). However, conduction abnormalities in ankylosing spondylitis are more

common when aortic regurgitation is the predominant lesion and when it has preceded evidence of spondylitis.¹ It is also more commonly associated with peripheral joint involvement and advanced age. Other common causes of heart block may include Lev's disease,² with impingement upon the conduction system by fibrosis or calcification developing with advancing age in the fibrous structures adjacent to the conduction system, more commonly seen in older patients. Aortic stenosis may accelerate this process. Disease involving primarily the conduction system has been called Lenegres disease,³ which appears to be a sclerodegenerative process of unknown etiology primarily involving the conduction system. Ischemic heart disease may account for 30% of all heart block, but many other diseases have been associated with AV conduction problems.

Multiple blood cultures failed to show evidence of endocarditis in our patient, whose third degree heart block was felt to be secondary to conduction system involvement with fibrosis accruing from his aortic valvular disease and subsequent surgery.

Final diagnosis: Complete third degree AV block. Idioventricular rhythm with left ventricular pacemaker activity.

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Update of Tuberculosis Services in Tennessee

In this issue of the *Journal*, there is an article, "Treatment of Pulmonary Tuberculosis: State of the Art, 1978," by H. R. Anderson, M.D., medical director of the Division of Tuberculosis Control, Tennessee Department of Public Health. The article indicates that a significant number of patients with pulmonary tuberculosis can be treated entirely as outpatients and that most of the remaining patients can be treated as outpatients after a brief period of inpatient treatment in an appropriately equipped and staffed general hospital. In the article, Dr. Anderson discusses improved understanding of the transmission and treatment of the disease that makes possible this approach to treatment.

In 1970, a task force was convened by Commissioner Fowinkle of the Department of Public Health, to advise him regarding what disposition should be made of the underutilized state chest disease hospitals. The task force recommended that the Department and its Division of Tuberculosis Control should divest itself of the underutilized tuberculosis and chest disease hospital beds. Anticipating probable closure of the state chest disease hospitals, the Department in 1975 moved toward providing treatment, when required, through appropriate general hospitals, private physicians, and a network of outpatient regional and metropolitan health department tuberculosis clinics. The last of the four state chest disease hospitals was closed on June 30, 1978, when the East Tennessee Chest Disease Hospital in Knoxville ceased operation.

The Department now operates a network of metropolitan and regional outpatient clinics for tuberculosis patients located in nine regional and four metropolitan areas each augmented by county health departments. Inpatient care, when required, is available by contract with appropriately equipped and staffed general hospitals.

From the Tennessee Department of Public Health, Nashville.

Activities are coordinated by the Division of Tuberculosis Control (Central Office), Tennessee Department of Public Health State Office Building, Ben Allen Road, Nashville, TN 37216, telephone (615) 741-7241, H. R. Anderson, M.D., Medical Director.

Services provided by the program include tuberculin skin tests, chest x-ray, sputum collection (natural and induced), smear and culture for tuberculosis and drug susceptibility tests, limited hematologic and biochemical studies, provision and/or administration of antituberculosis drugs, monthly monitoring for drug toxicity to antituberculosis medication, patient education, contact evaluations, home visits, medical and nursing consultation, community education, and hospitalization. Prophylactic and curative outpatient services and drugs are available without cost to all residents of Tennessee. Selected screening services are available in accordance with the state laws, rules and regulations, and inpatient services are available both to those able or unable to pay as specified in the State Tuberculosis Control Act and Communicable Disease Regulations. Arrangement for inpatient care should be made with the regional or metropolitan tuberculosis controller responsible for the county from which the referral is made.

The regional and metropolitan health department tuberculosis clinics which provide these services vary slightly in regard to facilities, availability of staff, and hours of operation. The following chart indicates when and where services can be obtained, who to contact and the areas served by the specific clinics. Services are most effectively provided by appointment. Appointment for services at satellite clinics in the metropolitan area, or within regions, should be made with the Tuberculosis Clinic of the Metropolitan Health Department (Nashville, Memphis, Knoxville, Chattanooga) or the appropriate regional health department office serving the other 91 counties.

REGIONAL AND METROPOLITAN TUBERCULOSIS CLINICS IN TENNESSEE

Clinic Sites	Hours—Physician in Charge	Associated County Health Departments
REGION 1—FIRST TN P.O. Box 1787 Johnson City, TN 37601 Tel. (615) 928-3071	Monday thru Friday—M.D. present Tuesday a.m.—T.B. physician: Jay Mehta, M.D.	Hancock, Hawkins, Greene, Sullivan, Carter, Wash- ington, Unicoi, Johnson
REGION 2—EAST TN 1522 Cherokee Trail Knoxville, TN 37920 Tel. (615) 546-9221	Monday thru Friday—M.D. present Tuesday a.m.—T.B. physician: Alfred Beasley, M.D.	Scott, Campbell, Clai- borne, Morgan, Anderson, Union, Grainger, Hamblen, Knox, Jefferson, Roane, Loudon, Blount, Sevier, Cocke, Monroe
KNOX COUNTY HEALTH DEPARTMENT Cleveland Pl., N.W. Knoxville, TN 37917 Tel. (615) 546-4606	Monday thru Friday—M.D. present Tuesday a.m.—T.B. physician: P. M. Huggin, M.D.	Four outlying clinics in Knox County
REGION 3—SOUTHEAST TN 2501 Milne Ave. Chattanooga, TN 37406 Tel. (615) 624-9921	Monday thru Friday—M.D. present Monday, Wednesday, Thursday— T. B. physician: W. B. Henry, M.D.	Bledsoe, Rhea, Grundy, Sequatchie, Meigs, McMinn, Marion, Polk, Hamilton, Bradley
CHATTANOOGA-HAMILTON COUNTY HEALTH DEPARTMENT 921 East 3rd St. Chattanooga, TN 37403 Tel. (615) 757-2103	Monday thru Friday—M.D. present Tuesday and Friday a.m.—T.B. physician: W. B. Henry, M.D.	Several outlying clinics in Hamilton County
REGION 4—UPPER CUMBERLAND TN P.O. Box 5033-TTU Cookeville, TN 38051 Tel. (615) 528-5535	Monday thru Friday—M.D. present Tuesday a.m.—T.B. physician: H. R. Anderson, M.D.	Macon, Clay, Pickett, Jackson, Overton, Smith, Fentress, Putnam, DeKalb, White, Cumberland, Cannon, Warren, Van Buren
REGION 5—MID-CUMBERLAND TN TN Dept. of Public Health State Office Building Ben Allen Rd. Nashville, TN 37216 Tel. (615) 741-7268	Monday thru Friday—M.D. present Friday a.m. and by appointment— T.B. physician: W. L. Diveley, M.D.	Stewart, Montgomery, Robertson, Sumner, Houston, Humphreys, Dickson, Cheatham, Davidson, Wilson, Williamson, Rutherford
METRO-NASHVILLE DAVIDSON COUNTY Lentz Health Center—311 23rd Ave. Nashville, TN 37203 Tel. (615) 327-9313	Monday thru Friday—M.D. present Monday, Wednesday, Thursday, Friday p.m. and Tuesday a.m.—T.B. physician: Robert Quinn, M.D.	Several outlying clinics in Davidson County
REGION 6—SOUTH CENTRAL TN 1216 Mt. Pleasant Columbia, TN 38401 Tel. (615) 256-4917	Monday thru Friday—M.D. present Wednesday a.m.—T.B. physician: W. L. Diveley, M.D.	Perry, Hickman, Maury, Marshall, Bedford, Coffee, Lewis, Wayne, Lawrence, Giles, Lincoln, Moore
REGION 7—NORTHWEST TN P.O. Box 190 Union City, TN 38261 Tel. (901) 885-7700	Monday thru Friday—M.D. present 2nd and 4th Tuesday a.m.— T.B. physician: T. G. Morris, M.D.	Lake, Obion, Henry, Weakley, Dyer, Gibson, Carroll, Benton, Crockett
REGION 8—SOUTHWEST TN P.O. Box 3010 Jackson, TN 38301 Tel. (901) 424-5757 Clinic service provided at: Madison Co. Health Dept. 745 W. Forrest Ave., Jackson, TN 38301	M.D. present 1st Tuesday a.m. each month; T.B. nurse present every Thursday p.m.—T.B. physician: T. G. Morris, M.D.	Haywood, Madison, Henderson, Decatur, Hardeman, McNairy, Hardin, Chester
REGION 9—MEMPHIS-DELTA 842 Jefferson Ave. Memphis, TN 38103 Tel. (901) 628-5065	Thursday a.m. M.D. present— Other days by appointment— T.B. physician: T. G. Morris, M.D.	Fayette, Tipton, Lauder- dale, Shelby
MEMPHIS-SHELBY COUNTY HEALTH DEPARTMENT 814 Jefferson Ave. Memphis, TN 38105 Tel. (901) 528-3791	Monday thru Friday—M.D. daily— T.B. physicians: J. L. Larkin, M.D., and Felix Hughes, M.D.	Several outlying clinics in Shelby County

State tuberculosis specialized nursing unit at Hillcrest Beverly, Tazewell Pike, Knoxville, Tennessee. T. B. physician: Spencer Y. Bell, M.D. Patients accepted only on referral through regional or metropolitan health department tuberculosis controller and with approval of unit physician.

IMPACT: For Your Freedom

An Interview with Oscar M. McCallum, M.D.

Q. Would you tell us something about the history of IMPACT and why it was organized?

A. Independent Medicine's Political Action Committee—Tennessee (IMPACT) was organized in 1962, one year after AMPAC (American Political Action Committee) was conceived. New election laws at that time made it desirable for physicians to form an organization which could, under the laws, contribute to those candidates who were favored by the medical profession.

Q. In which elections does IMPACT participate?

A. In the committee's formative years, it participated only in federal elections (U. S. House of Representatives and U. S. Senate). Currently, it is spending more time and money on state races (State House and Senate).

Q. In other words, IMPACT is an active supporter of both state and federal candidates for political office?

A. Exactly.

Q. Why shouldn't physicians just contribute directly to a candidate rather than through IMPACT?

A. A candidate for political office benefits from any contribution regardless of whether it is from a group or an individual. However, the effectiveness of support from an organization such as IMPACT, the political arm of the medical profession, tends to be larger when pooled with other IMPACT members. Physicians should also personally contribute to candidates.

Q. Who determines how IMPACT's money is spent?

A. IMPACT has its own Board of Directors, made up of eight physicians, representing each of the congressional districts, and one representative from the TMA Auxiliary. The director of each of the eight IMPACT districts is responsible for the expenditure of funds received from physicians in his district. In some districts, the Board member appoints a committee to work with him and provide him with information about each candidate and the desires of physicians in that candidate's

district. IMPACT will not support a candidate unless the physicians in that district clearly are in favor of such support.

Q. What percentage of the IMPACT dues is contributed to political candidates?

A. One hundred percent of all dues received by IMPACT are used toward political contributions. IMPACT pays a staff person and bookkeeper on a part-time basis. TMA contributes annually to IMPACT's educational fund which is used for administrative expenditures such as travel, postage, salaries, and the *IMPACT Newsletter*.

Q. How are dues collected?

A. Dues are normally collected with local medical society dues and then transferred to IMPACT by the society. However, there are exceptions. In Nashville, physicians have formed a local PAC (MEDPAC) which collects dues for IMPACT and AMPAC. In Sullivan and Johnson counties, physicians have formed BIPAC which operates on the same basis as MEDPAC. At the 1978 meeting of the TMA House of Delegates, a resolution was adopted enabling IMPACT and AMPAC dues to be included on the new central billing system being used by the majority of county medical societies. IMPACT dues are voluntary and no one is condemned if he chooses not to participate.

Q. Dr. McCallum, could you give us an idea about physician participation, approximately how many members you have and the opportunities members have to participate in the political process through IMPACT?

A. When IMPACT was first organized 16 years ago, we collected dues from a total of 79 members. In 1963, that figure increased to 267. In 1964, it rose to 401. Also in 1964, IMPACT created its Auxiliary membership category because of the interest of physicians' wives in becoming more involved in politics along with their husbands. That first year, the Auxiliary membership of IMPACT was 28. In 1972, the Auxiliary had an all-time high of 137 members. IMPACT membership for the 1960s peaked in 1968 with 1,001 members. During the 1970s, IMPACT's membership has remained around 1,000.

Dr. McCallum is chairman of the IMPACT Board of Directors.

"Our future ability to practice medicine freely in our private offices depends on our involvement in the election process."



Information concerning participation by physicians or their wives can be obtained by contacting the Nashville office. We have abundant information that will be very helpful to anyone wanting to be active in a political campaign.

Q. Does IMPACT support only candidates from a particular political party?

A. No. IMPACT is bipartisan, as required in the committee's bylaws. In the 1976 elections, we contributed almost \$33,000 in both state and federal elections to candidates from both major political parties. We were successful 73% of the time that year. I believe that's a good percentage because it shows that we do take some chances and don't just support those candidates who are assured of winning.

Q. Does IMPACT collect dues annually or just in election years?

A. IMPACT collects dues annually. However, you've touched on a problem. Many physicians don't realize IMPACT is a continuous PAC and we must have participation in non-election years to enable us to be effective in election years. If every physician in the TMA would participate, we would have almost \$150,000 each election—primarily for state races—and a contribution to AMPAC of nearly \$100,000. Imagine the clout medicine could muster if every physician would give only \$25 per year to IMPACT!

Q. Are there different types of membership in IMPACT/AMPAC?

A. Yes. Regular family membership is \$40. However, a physician may join IMPACT for \$25. Members of the TMA Auxiliary may join for \$15. A sustaining membership is \$65 for a physician and \$55 for a member of the TMA Auxiliary. This top level of membership enables a member to receive the *AMPAC Sustainer Newsletter*, which continually informs members of AMPAC's national efforts. Also members receive the significant "99+" pin so often seen on the lapels of medicine's leaders.

Q. Why don't more physicians belong to IMPACT?

A. Good question. I believe that most physicians

are so caught up in their professional lives that they are just not aware of the "dark cloud" of federalism which hangs over our heads. Hopefully, IMPACT, through interviews such as this one, will help educate physicians to see that there is an alternative to just letting politicians dictate to us. We have the opportunity to give financial assistance, as well as the support of some 4,500 Association members, to a candidate with whom we agree on political philosophy. Our future ability to practice medicine freely in our private offices depends on our involvement in the election process. Unlike labor groups, physicians comprise a very small percentage of voting population. We must counter this by assisting the candidates of our choice the best way we can—and that is by financial assistance.

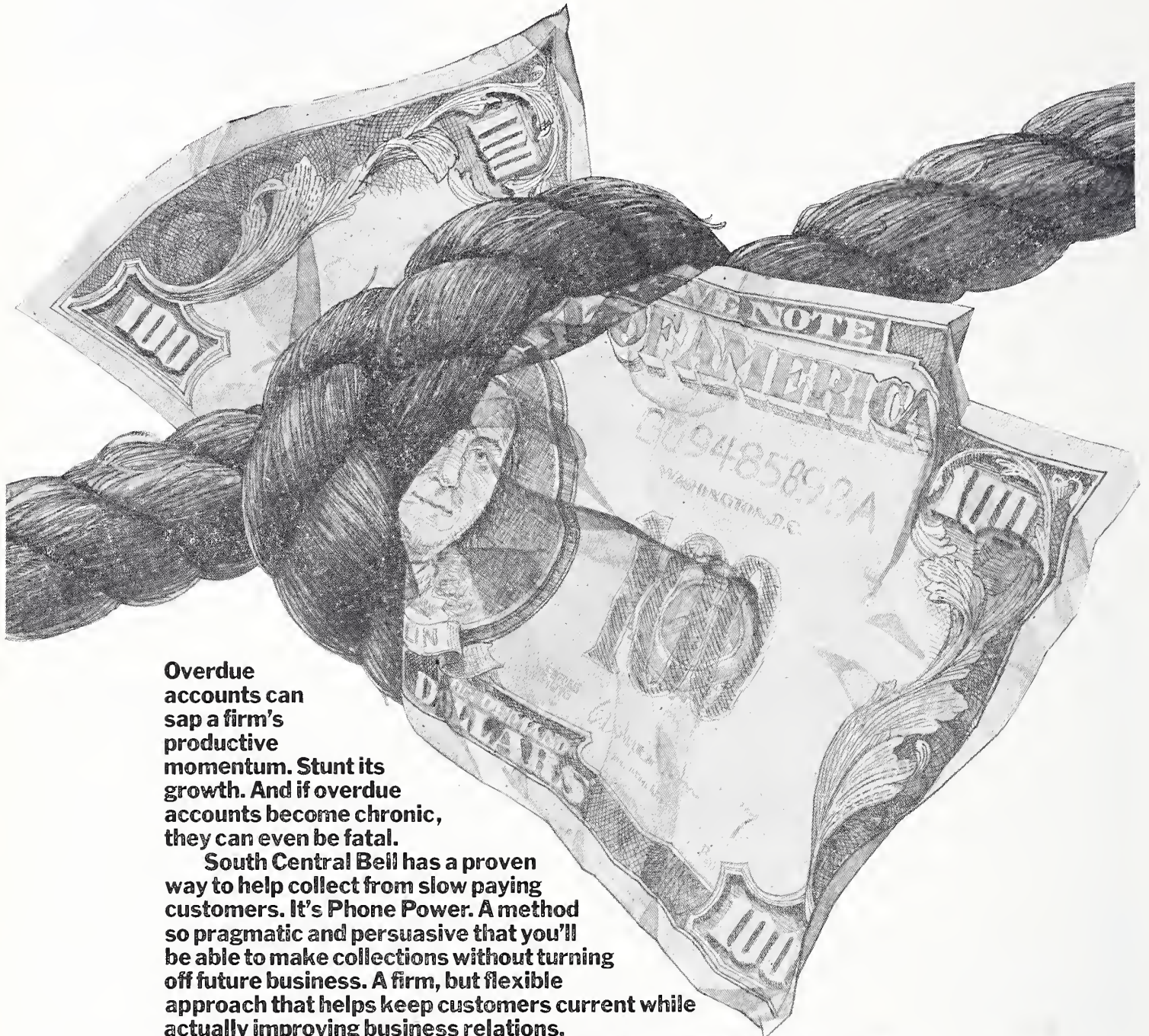
Q. How do a physician and his wife and/or family join IMPACT?

A. *AS QUICKLY AS POSSIBLE!* By the time this *Journal* reaches physicians, we will only have a little over a month before the November general election, but it is never too late for a physician to join IMPACT/AMPAC. I will stress though that I am more interested in physicians becoming aware of IMPACT now and contributing to IMPACT/AMPAC when collection begins for the 1979 medical society dues. Remember, we must collect annually. The support of each and every physician is a must if IMPACT is to continue keeping the medical profession actively involved in politics.

WHO TO CONTACT

IMPACT's address is P.O. Box 22645, Nashville, TN 37202. Physicians in Davidson County should contact MEDPAC (Medicine's Political Action Committee-Davidson County, 205 23rd Ave., North, Nashville, TN 37203, telephone 327-1236) for dues information. In Sullivan-Johnson counties physicians should contact BIPAC (1916 Brookside Rd., Kingsport, TN 37660). Both MEDPAC and BIPAC are local political action committees which also collect dues in respective counties for IMPACT and AMPAC.

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A Summary of Pertinent Medical Information About Paraquat in Marijuana

Introduction

Paraquat-contaminated marijuana from Mexico has been distributed within the United States since at least October 1976.

We do not know for sure that smoking marijuana contaminated with small amounts of paraquat has adverse health effects. However, the available evidence suggests that pulmonary fibrosis might occur among long-term heavy users. Respiratory irritation might be caused by the pyrolysis products of paraquat.

Background

Paraquat (1,1'-dimethyl-4,4'-dipyridylium) is a quick-acting herbicide and plant desiccant. Since late in 1975, the Mexican government has sprayed marijuana fields with paraquat from airplanes. The interaction of paraquat and sunlight desiccates the leaves and kills the plant within 24 to 38 hours. However, if plants are harvested before they are significantly exposed to the sun, the leaves are not destroyed and paraquat persists on dried leaves.

About 60% of marijuana used in the United States originates in Mexico. Testing by the National Institute of Drug Abuse (NIDA) of marijuana confiscated at the border showed that 31 of 63 specimens (21%) collected from October 1976 through June 1977 were contaminated with paraquat. No variation in the prevalence of positive specimens was apparent. Concentrations range from 3 to 2,264 ppm, with an average of 452 ppm and a median of 87 ppm. The distribution of Mexican marijuana within the United States is not well known.

Animal Toxicity

Paraquat is corrosive to epithelial tissue. Only about 25% of an ingested dose is absorbed, and most of that is excreted within 48 hours. However, small amounts may be retained in the lungs for longer periods of time. Damage to liver, kid-

ney, heart, and lungs occurs. Pulmonary damage is the most significant. As little as 10 μ g instilled into the lungs of rabbits produced localized fibrosis. As little as 10⁻³ to 10⁻⁶ μ g produced thickening of the alveolar basement membrane. Unlike the fibrosis, the thickening of the basement membrane probably is reversible, but specific data are lacking. The acute oral LD50 is 100 to 150 mg/kg for rats, 50 mg/kg for monkeys.

Human Toxicity

Dermatitis and epistaxis have been reported among workers applying paraquat with hand sprayers. Corneal scarring has occurred after eye contact. Over 100 persons have died after ingesting concentrated solutions of paraquat. As little as 3 gm of paraquat has caused fatal pulmonary fibrosis. Early symptoms after ingestion are a burning sensation in the throat, abdominal pain, vomiting, and diarrhea. Pulmonary damage is the most severe complication and, depending on damage, may be manifested by abnormalities of the urinalysis and serum chemistries. In the lungs, intra-alveolar edema, hemorrhage, and inflammation are followed by the proliferation of fibrous tissue. The fibrosis may be progressive, causing death several weeks after ingestion.

Preliminary results of studies of paraquat applicators who have long-term exposure to small doses show that they have impairment of CO diffusion, mean mid-expiratory flow rate, and vital capacity compared with controls.

Estimated Exposure from Paraquat-Contaminated Marijuana

Studies at NIDA show that approximately 60% to 70% of the paraquat on marijuana is converted to bipyridine when the marijuana is smoked. Bipyridine has toxicity similar to pyridine, a respiratory irritant present in tobacco smoke. About 1% of the paraquat remains in the ash and only about 0.03% comes off in the smoke. Therefore, a person who smokes 1 gm of marijuana containing 2 mg of paraquat (2,000 ppm) might inhale as much as 0.6 μ g of paraquat and 1,300

Reproduced from the National Clearinghouse for Poison Control Centers Bulletin, Spring Special Issue, 1978.

μg of bipyridine (the smoke from one cigarette contains 25 to 218 μg of pyridine). Persons who smoke 4 gm of marijuana per day might be exposed to as much as 2.4 μg of paraquat per day, which is about the same amount that if instilled as a bolus causes localized fibrosis in the rabbit lung.

Most marijuana users, however, will not be exposed to this much paraquat. Based on the confiscated batches only about 20% of Mexican marijuana is contaminated with paraquat and the median concentration of contamination is only 87 ppm. A person who smokes 4 gm per day of marijuana with 87 ppm of paraquat might inhale as much as 0.1 μg of paraquat and 226 μg of bipyridine. Current laboratory methods are not sensitive enough to detect paraquat or its metabolites in the blood or urine of marijuana users even at the highest expected levels of exposure.

Health Implications

Pulmonary fibrosis among long-term heavy users of paraquat-contaminated marijuana is the adverse health effect of the greatest potential concern. The fibrosis may be extensive before the resultant dyspnea brings the patient to medical attention.

At this point in time, the signs and symptoms most commonly reported with (but not necessarily caused by) smoking paraquat-contaminated marijuana are respiratory tract irritation, cough, and hemoptysis. While these symptoms are compatible with exposure to airborne paraquat, they seem unlikely at the expected exposure from smoking contaminated marijuana. If related to smoking contaminated marijuana, these signs and symptoms may be due to bipyridine or other unidentified pyrolysis products.

Recommendations

At the current levels of contamination, paraquat cannot be seen, tasted, or smelled on the marijuana. No simple laboratory test is available for home use. While the risk of pulmonary damage seems slight, it is a serious enough possibility that smoking paraquat-contaminated marijuana cannot be considered entirely safe. Further studies of this potential health risk are needed.

With this in mind, we would like to hear about patients with hemoptysis or pulmonary fibrosis who have been evaluated by a physician for other possible causes, and who have more than 2 gm of that supply available for analysis.

Kenneth E. Powell, M.D.
Special Studies Branch
Chronic Diseases Division
Bureau of Epidemiology
Center for Disease Control
Atlanta, GA 30333

BRIEF SUMMARY OF PRESCRIBING INFORMATION

ANTIMINTH® (pyrantel pamoate) **ORAL SUSPENSION**

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 $\mu\text{g}/\text{ml}$) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions: Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

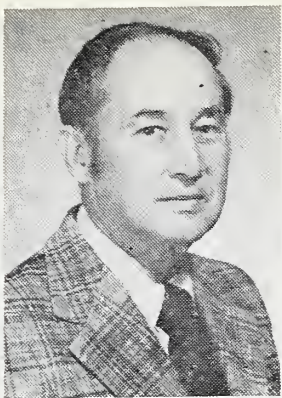
Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

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JOHN B. DORIAN

Second Opinion—How's That Again?

The recent thrust for a second opinion in elective surgery has brought a deluge of ideas regarding its effectiveness. The many confusing and contradictory ideas concerning the concept prompt this article.

The concept of second opinion is a politicized version of consultation. Where medical consultation is an adjunctive device to ensure quality of care, the basis for the second opinion programs is cost control by reducing "unnecessary" surgery.

The definition of unnecessary surgery is hard to come by. Considerable literature is accumulating regarding the second opinion programs. Nowhere have I seen the term defined. Apparently, most writers consider it to be elective surgery, which if not performed, will not seriously affect a person's lifestyle. No mention is made of quality of life. Therefore, included in the above would be many orthopedic procedures involving prostheses, most elective reconstruction, and many gynecological and general surgical opinions. T and A's are equally suspect.

**president's
page**

Two outspoken recent proponents for second opinion programs are HEW and the Prudential Insurance Company. There are similarities to their approach. Both will develop a panel of physicians who will be available to give the second opinion.

HEW's list will be developed by Equitable Assurance Society and will be made available to Medicare and Medicaid patients. Prudential's list will be closed, i.e., the patient may choose *only* a physician on the list. The policy is ready for marketing, and the panel of physicians is being recruited.

A major flaw in the concept is the feeling that if the second opinion does not confirm the need for surgery, then the operation is unnecessary. Or, expressed in another way, where there is a difference in the opinions, the second opinion is correct. Again, this is a theoretical dollar savings, without regard to quality.

Equitable was assigned the list-holder duty in Tennessee after TMA declined the offer. There are numerous potential liability and administrative pitfalls involved, not the least of which is assuring the quality of the second opinion.

HEW's program is being pushed even before they know the results of pilot programs in New York and Michigan, which, incidentally, HEW has funded to the tune of \$979,074. An interesting comment was recently made by an HEW official: "I think it's safe to say that most people involved in the second opinion planning have some qualms about it, but the secretary apparently feels that, despite those expressed qualms, this is a process that must be given an opportunity."

Prudential's program has an additional devastating consequence for its policyholders. Under their "alternate approach," if the proposed surgery is "unconfirmed" by the second opinion from its closed panel, and the patient proceeds with the operation advised by his private physician, a lessor fee is paid by the company.

This same smaller fee will be paid if the patient declines, on the front end, to avail himself of the second opinion. This proposed erosion of the physician-patient relationship is a horrible example of placing the cart before the horse, or cost before quality.

The American College of Surgeons has considered the concept with objectivity in memos, articles, editorials, and panels. They raise the above and other questions regarding the idea. It has been pointed out in some early statistics that the procedure is sometimes not eliminated, but merely deferred. Therefore, the interim medical costs prolong the care and, consequently, increase the costs of restoring the patient's well-being.

The American College of Surgeons also believes that only a peer should give the second opinion. This concept is valid in consultation when the first physician seen by a patient is a surgeon. It is not valid, however, when the patient is seen by a primary physician. In that situation, the surgeon to whom the patient is referred for the procedure is and should always be the second opinion. Certainly an internist can diagnose the presence of and need for repair of a hernia. Certainly, we are not going to suggest or advise a third opinion. One program offered by a third party insists the second opinion must be given by one who "could or would" perform the operation himself. This, too, I submit, is rubbish.

I hope our members who are being solicited to become panelists will be cautious in accepting the blandishments projected by the media and by personal contact. We continue to encourage consultation upon request of the patient, or whenever quality of care can be improved. We vigorously oppose a second opinion philosophy that places alleged cost advantages before quality of care. And we will continue to apprise the patient of the difference.

Sincerely,

John B. Dorian, M.D.
PRESIDENT

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SEPTEMBER, 1978

editorials

Bah! Humbug!

A couple of weeks back I received a brief letter from one of our colleagues, with a copy of a letter he had written our President, John Dorian, M.D., as well as a copy of the letter to which he was responding, namely a proposal by the Prudential Insurance Company of America that he become a panelist in Prudential's Elective Surgical Second Opinion Program. His comment to Dr. Dorian was, among other things, "This

sort of thing is getting just a little bit old and I would like to see us respond to it. I think the very nature of it automatically assumes the surgeon recommending elective surgery is guilty until proven innocent." Precisely.

This is precisely what they do think, and it is precisely what they would have the public think. Dr. Dorian has responded most appropriately in his Presidential Letter on the preceding page of this journal, and there are only a couple of other points I wish to make. Our colleague indicated he was interested in my comment, and this editorial response is essentially what I wrote him. It is a topic which for some time now has been high on my list of things to address editorially, but I have never felt the time was exactly right. The time is exactly right.

In the first place, I find the entire concept of a second opinion program offensive, inasmuch as it implies not so much that the judgment of any of us can be wrong, which of course it can, and which we realize that it can, but that it implies unwillingness on the part of surgeons, and indeed physicians generally, to seek consultation. I am certain there are instances which all of us can think of where it would have been worthwhile to seek a second opinion when none was sought, but the vision is always good through a retrospectoscope. The implication is that medicine is an exact science, and if one only practices the science right, he is bound to come up with the correct answer, whereas all of us know this is not so.

The second matter which disturbs me is that this will unnecessarily and vastly increase the cost of medical care. Not only will it increase the monetary cost, but the cost to the patient emotionally will be incalculable. Where two experts disagree, there can be no certainty as to which is right, and the second opinion will then call for a third opinion and perhaps a fourth opinion and so on and on, perhaps not insofar as Prudential is concerned, but for the patient's peace of mind. As a pathologist, I have found that on the difficult cases where I and one of my colleagues disagree, if we send the slides to ten pathologists we are quite likely to find five on one side and five on the other. This is a situation in which the second opinion program is vastly wanting.

I think all of those who have administrative responsibility for such a program, such as insurers and legislators, should be made aware of these facets of the problem. While I believe it unlikely they will be sympathetic to our problems, perhaps they can understand that there is going

to be a tremendous cost to the patient, and because much of the expense is born by tax supported agencies, the expense will be shared by all of us.

J.B.T.

Necessary For What?

One of the most popular notions today, bandied about in the Department of HEW and even in the halls of Congress, is that proper health depends on good preventive medicine. It is as if they had just thought of it, and were pushing it onto the medical profession as a panacea for mankind's medical woes and the increasing cost of health. It certainly is a fact that too little attention has been given it. One aspect of the tenet, certainly valid, is that the individual must take more responsibility for his own health. This requires from both the medical profession and governmental agencies an adequate program of public education. The other aspect, also valid and no less difficult to effect, is that if you stamp out all the causes of illness, good health will result. This seems so obvious as to be not worth saying, but it is at the root of all preventive medicine.

Translated into the world of law, this tenet would say that if you stamp out all the causes of crime, good community health will result. Javert, one of fiction's most brilliant "black hats," took this to mean that since a man is "once a criminal, always a criminal," you keep him in the galleys for life, and Javert, in Victor Hugo's *Les Misérables*, spent his career hounding Jean Valjean to that end. Unable to reconcile Valjean's transformation with his philosophy, Javert in the end took his own life.

In health matters the problem lies with such things as germs, insect vectors or intermediate animal hosts, radiation, food additives, and the like. Although the solution is not easy, the factors are all alien to humanity, and can be attacked. The problems of community health are different, and we carry over into their solution the measures designed to promote individual health at our peril. The diseases of the community are caused by people, and the basis for crime is man's lawless nature. The problem lies in the fact that we cannot treat people in the same way we treat the pneumococcus or the mosquito. Or we *should* not.

George Will, to my mind a very perceptive writer, commented that Alexander Solzhenitsyn's Harvard speech has been widely misinterpreted

by both conservatives and liberals, who have read into his words implications applicable to their own views in such areas as our relationships with the Soviet Union, military armament or disarmament, and what not. Will says it was in fact a philosophical speech, the major points of which were that the West has lost sight of whom and for what to fight, and that freedom is a result of virtue and not the other way around. We are using the law, Solzhenitsyn says, not as a teacher, but as a restraint only, and because we are, we spend our efforts to be sure we are operating just within the very borders of legality.

A lot has been written and said for the past decade or so about police brutality and police state tactics, because we have seen so much of it in other countries—Nazi Germany, Russia, Latin America, Vietnam. Because at last we saw it in ourselves, we have badly undermined our law enforcement agencies, which I think, given the fact that we do not live in the best of all possible worlds, and that every day in every way everyone is *not* growing better and better, is both dangerous and wrong. The criminal's individual rights are being protected at the expense of the law abiding citizenry. There is a balance which needs to be maintained, and that balance is hard to find. It is hard to find because of philosophical differences not as easily definable as black and white as Javert versus Jean Valjean. Solzhenitsyn said that in the broad framework of our laws it is possible to promote not only individual freedom, but individual crimes as well. Does freedom lead to virtue, or virtue to freedom?

Javert took the simplistic public health approach in saying that you can stamp out crime by stamping out criminals. Valjean was sent to the galleys for a very minor offense. Victor Hugo was a reformer who was attempting to show how wrong the French system of justice was in his day, and that just as Jean Valjean was made a criminal by his sentence, even so he was transformed by an act of kindness. The practicality of Hugo's message has been and still is being both widely and hotly debated. Can criminals be rehabilitated? Javert, the perfect police officer, says no; the risk is too great. On the other side, to the thief on the cross Jesus said, "Today you shall be with me in Paradise." Our society's approach has been toward rehabilitation. Even our prison system is the "Department of Corrections." But it can be and often has been overdone.

The other day a local newspaper carried a

story about a convicted teenage heroin addict who was given a suspended sentence, provided she would undergo treatment. She was trying desperately to "kick the habit and go straight," but she was constantly harassed by people trying to persuade her to buy them a fix—people she found through a friend were police officers. Workers at the treatment center said this is the usual practice, and that it greatly hampers their rehabilitation efforts. When asked about the practice, an assistant police chief said, "It's like we have a hammer over their heads. We try to get anybody we can to make a controlled buy for us. We'll do anything we can to curb the drug traffic. . . . You have to use people who know what's going on. It's not something we like to do, but it's necessary."

The purpose of preventive medicine is to help individuals. The purpose of preventive law is to help society. Totalitarian governments say the individual exists for the state; the state "uses" people. Western culture, grounded in the Judeo-Christian heritage, has said the state exists for its individual members. It is the basis of democracy and our republic. Although the two must invariably come into conflict, what is ultimately best for the state is the welfare of its individual members. Javert would say this "best" is to rid the state of all criminals, and that is done by keeping them locked up.

Is a person who has been convicted by a court of law no longer a member of society? Is that person's welfare removed by his conviction from the concern of society? When a person is sentenced by the court to obtain help, even if it is legal to do so, is it moral—is it virtuous—for law enforcement to frustrate that sentence? Being an addict is trouble enough. Is it necessary to make him a "pusher"? Is that not living at the border of legality? Solzhenitsyn says freedom comes from virtue. Have we lost sight of whom and for what to fight? Javert would say, "It's not something we like to do. But it's necessary."

What is necessary?

And necessary for what?

J.B.T.

Matthew Walker, M.D., R.I.P.

Because Tennessee has produced so many outstanding physicians, many of whom I have been privileged to be associated with in one capacity or another, I have resisted pressures from both within and without to editorialize on their life or

death, not wishing to show partiality. I have departed from this only in instances, and I am sure not even in all of those, where the individual was by virtue of position, office, or accomplishments unique. Matthew Walker was unique.

He was born in Waterproof, La., about the turn of the century and was graduated from Meharry Medical College in 1929. Except for a period when he was a house officer at Howard University's Freeman Hospital, his professional career was tied to Meharry, which at his death he was serving as provost for external affairs. He became a Diplomate of the American Board of Surgery at its founding and was one of the first black surgeons to be admitted to Fellowship in the American College of Surgeons.

Although as chairman of the Department of Surgery at Meharry from 1943 to 1973 he trained more black surgeons than any other man in the United States, it was his vision of the community-wide responsibility of medicine and the contribution medicine could make to the community that established his unique position. Nor was his area of service Nashville, or even Tennessee, alone. His interest was in equalizing medical care throughout the country, so that when in the 1940s the poor, predominantly black community of Mound Bayou, Miss., asked him to upgrade health care in their area, he rotated Meharry surgeons, although in short supply at home, through the struggling hospital there, helping to develop an area comprehensive health care center. That center would be the pattern for the Matthew Walker Neighborhood Health Center and similar centers nationwide.

The honors and positions of trust which came to Matthew Walker were legion, too numerous to mention here. Some of the more important were first vice-president of the Metro Nashville-Davidson County Board of Hospitals, on which he had served since 1961; past president of the National Medical Association, whose distinguished service award he received in 1959; and member of the American Medical Association, Tennessee Medical Association, Alpha Omega Alpha, and the Society of Surgical Chairmen.

Lloyd C. Elam, M.D., president of Meharry, summed up Dr. Walker's contributions in a fitting tribute in which he said, "There are certain men in this country who have made a difference in the quality of life for others. Dr. Matthew Walker was one of those men. The poor, the sick, the

disadvantaged—these were the people that experienced the good of Matthew Walker's work. . . . Certainly his greatness will always be a part of this country through the continuing efforts of those he taught and the success of the health care delivery systems he encouraged."

Matthew Walker, *R.I.P.*

J.B.T.

The "Other" Lookout Mountain

People get all bogged down in words in trying to communicate, and the first thing you need to do in any serious conversation is be sure terms used mean the same thing to everybody. If we always did that, it would obviate a lot of misunderstanding, and who knows, maybe even some wars, large or small. For example, Israel means one thing to a Palestinian, and something quite different to an Israeli. As a matter of fact, it does not necessarily mean the same thing to every Israeli. People in the United States speak of America as if we owned it all, to the chagrin of Canadians and Latinos. Whiskey and soda is certain to mean bourbon—with ice—in Kentucky, and Scotch—without ice—in Europe. The list could go on and on.

The other day I was taking a picture of Umbrella Rock on Lookout Mountain. I was taking its picture not because of its beauty but because of its desecration. It and the rocks on either side of the road were decorated with the most horrid assortment of spray painted names, some in hearts, "John + Mary" 's, and what-not that I have ever seen. I commented to a couple, the only other people in sight, that the scene was truly unbelievable, and the woman allowed as how indeed it was, and that she and her husband had come back to visit the place she had been born 63 years ago—only a few hundred yards from where we were standing. Umbrella Rock, she said, was on their property, at the edge of their pasture. She was interested that I grew up on Lookout Mountain, a few years behind her, within a mile of Umbrella Rock. But her umbrella rock is on Lookout Mountain in the middle of the Little River Gorge Parkway in DeSota State Park, Alabama. Mine is some 50 miles north in Point Park on the same Lookout Mountain, but in Tennessee. We were neighbors—but not close.

She has her Lookout Mountain and I have mine, but neither of us is any less an outsider now in one than the other, because her umbrella rock is in a park and covered with spray paint, and

mine—well, it never was "mine" in the sense that hers was hers—, but I used to climb up on top of it. I have a picture of me on top of it. Now it has a fence around it, because it's unsafe to climb on, they say. I also have a picture of my father on it, with about 20 other men. My umbrella rock is bigger than hers. But no matter. That day I was enjoying her rock and her pasture and her part of the mountain.

Point Park is just what the name implies—on the point of the mountain. What I knew as a boy of Lookout Mountain was no more than two or three miles wide as far back as the road ran down into Georgia, about ten miles from the point. To get onto the mountain at Mentone, Ala., or Cloudland, Ga., you went down one or the other of the valleys and came back up. The mountain there is 10 or 15 miles wide, and where it ends, at Gadsden, Ala., about 90 miles from the point, it is maybe 20 or 30 miles or so wide.

The Little River arises on the mountain from tributaries near the corner where Tennessee, Georgia, and Alabama intersect, and though as the Little River it is entirely in Alabama, it has a lot of Georgia and maybe even some Tennessee water in it. Over the millenia it cut a gorge 600 feet deep into the mountaintop, the deepest east of the Rockies. It is about ten miles long as the crow flies from the falls where it starts to its mouth where it ends in Weiss Lake, but the road along the rim is 25 miles long, so you can get some idea about the twisting and turning you have to do. The gorge ends suddenly and the road descends fast, and you think you are off the mountain. But you are not. You are only about half way down, because the lake is on the mountain, too.

The gorge starts out narrow about 15 miles or so below Mentone, and although there are some overlooks, the walls of the gorge are overgrown so that the river can't be seen—only hundreds of old rusted out cars and some appliances that have been pushed over the edge. As you go southwest, and get further from civilization, though—Umbrella Rock is very near the northeast end—the carcasses abate as the walls become precipitous, the gorge deepens and widens and often branches to receive the river's tributaries, and before you is a huge, magnificent, overwhelming gash in the earth's crust, nearly three quarters of a mile wide in places.

I was there in a drought, and there was not much water in the river. There is evidence there

may be more at times, but at the river's mouth there is a park with a campground which is not far above the level of the river even now, so it must not flood. Perhaps the runoff into the lake is sufficient to handle whatever water the river carries. I have made a mental note to try it again, and perhaps hike up the trail into the gorge, at another time of year. It is bound to be a different place at each season.

There is something fascinating about a gorge, something which arouses awe in me more than anything else—more even than mountains or the ocean. It is hard to define. Maybe it's the thought of how much water it took to whittle away at the mountain to make it, or astonishment at the power of the water, or maybe wonder at the ages of time it must have taken. I have not seen everything in the world by a whole lot, but I have seen a good deal of it. I have seen the Rockies and the Alps and the Atlas Mountains and the Mojave Desert and the Sahara and Death Valley. And I have seen the Grand Canyon of the Colorado, and I have seen nothing to equal it—or even nearly equal it.

The Little River Gorge is about next best.

J.B.T



W. R. C. Stewart, Jr., age 50. Died July 24, 1978. Graduate of University of Tennessee School of Medicine. Member of Nashville Academy of Medicine.

Matthew Walker, age 71. Died July 15, 1978. Graduate of Meharry Medical College. Member of Nashville Academy of Medicine.

new members

The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

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Keith D. Peterson, M.D., Clarksville

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Jill F. Chambers, M.D., Nashville
Richard T. Hoos, M.D., Nashville
Richard E. Presley, M.D., Nashville

PUTNAM COUNTY MEDICAL SOCIETY

Harry L. Stuber, M.D., Cookeville

SUMNER COUNTY MEDICAL SOCIETY

M. Alfred Todd, M.D., Gallatin

personal news

John B. Dorian, M.D., Memphis, President of the Tennessee Medical Association, has been appointed by Gov. Ray Blanton to serve on the Tennessee Board of Nursing. Dr. Dorian represents the Tennessee Medical Association on this board and will serve until Oct. 1, 1981.

Charles W. Harland, M.D., Memphis, and *Michael Jackson, M.D.*, Crossville, were recently appointed assistant chief medical examiners for the state of Tennessee. Dr. Harland, an instructor for the Department of Pathology in the UTCHS, has been serving as deputy county medical examiner for Shelby County and is performing jointly with Dr. James Bell the medicolegal autopsies for West Tennessee. Dr. Jackson is in private practice and pro-

vides pathology coverage in several East and Middle Tennessee counties.

G. B. Kirshna, M.D., Tullahoma, has been certified by the American Board of Surgery following his recent completion of a qualifying examination.

Nathan Porter, M.D., Greenfield, has been named chief of medical staff for Volunteer General Hospital for 1978-79. Other officers elected were *Robert Trevathan, M.D.*, Martin, vice chief of staff; *Kenneth Carr, M.D.*, Martin, secretary.

programs and news of medical societies

Marshall County Medical Society

Members of the Marshall County Medical Society and the Maury County Medical Society and their wives were guests of Dr. and Mrs. Bill Taylor for a social hour and dinner at their Lewisburg estate for the Aug. 11 meeting of the Marshall County Medical Society. Dr. Dale VanSlooten, secretary of the Marshall County Medical Society, welcomed the group on behalf of the Society. Fifty-five members and guests attended. Dr. Oakley Ray, author and professor of psychopharmacology at Vanderbilt University, gave a poolside lecture after dinner on "Drugs in Today's Society."

national news

From the AMA's Office in Washington, D.C.

No One Likes Anyone Else's NHI Plan: The President's Plan Reviewed

Kennedy-Labor forces upstaged President Carter's release of national health insurance principles by denouncing them as "unacceptable overall" a day before they were to be made public.

Sen. Edward Kennedy (D-Mass.) and AFL-CIO President George Meany in a joint press conference a day before the scheduled release of the NHI principles charged Carter with "a failure of leadership" and of "misreading the mood of the people."

A day later President Carter called for an NHI plan that through a step-by-step process would ultimately lead to comprehensive health coverage for all. He directed Health, Education, and Welfare Secretary Joseph A. Califano to develop a tentative plan as soon as possible which embodied ten White House derived NHI principles.

James H. Sammons, M.D., Executive Vice President of the AMA, stated:

"The American Medical Association is pleased that

the President appears to have recognized the many positive aspects and strengths of our health care system in the process of presenting his national health insurance principles. Many of the NHI principles announced by the President seem to be consistent in whole or in part with similar principles that have been endorsed by the American Medical Association. These include the need for comprehensive health care coverage, freedom of choice of physician, hospital, and health care delivery system, the provision of quality care, and the utilization of the private health insurance industry. The AMA has introduced legislation embodying these principles in the Congress since 1970."

Charging that the President's principles were "simply too little and too late" to form the basis of a program, the Kennedy-Meany faction stated that while it "hoped the current break with the President could be repaired—it would proceed on its own to develop an NHI program that will meet the urgent and basic needs of the people of America."

The President's NHI principles:

- The plan should assure that all Americans have comprehensive health care coverage, including protection against catastrophic medical expenses.
- The plan should make quality health care available to all Americans. It should seek to eliminate those aspects of the current health system that often cause the poor to receive substandard care.
- The plan should assure that all Americans have freedom of choice in the selection of physicians, hospitals, and health delivery systems.
- The plan must support our efforts to control inflation in the economy by reducing unnecessary health care spending. The plan should include aggressive cost containment measures and should also strengthen competitive forces in the health care sector.
- The plan should be designed so that additional public and private expenditures for improved health benefits and coverage will be substantially offset by savings from greater efficiency in the health care system.
- The plan will involve no additional federal spending until FY 1983, because of tight fiscal constraints and the need for careful planning and implementation. Thereafter, the plan should be phased in gradually. As the plan moves from phase to phase, consideration should be given to such factors as the economic and administrative experience under prior phases. The experience of other government programs, in which expenditures far exceeded initial projections, must not be repeated.
- The plan should be financed through multiple sources, including government funding and contributions from employers and employees. Careful consideration should be given to the other demands on government budgets, the existing tax burdens on the American people, and the ability of many consumers to share a moderate portion of the cost of their care.

- The plan should include a significant role for the private insurance industry, with appropriate government regulation.
- The plan should provide resources and develop payment methods to promote such major reforms in delivering health care services as substantially increasing the availability of ambulatory and preventive services, attracting personnel to underserved rural and urban areas, and encouraging the use of prepaid health plans.
- The plan should assure consumer representation throughout its operation.

In his statement Dr. Sammons pointed out that the AMA agreed with the need to restrain increases in the cost of care and to control the inflationary impact of any program considered by Congress—but that careful consideration must be taken that quality and access to care were not adversely affected. He also touched upon the AMA's participation in the Voluntary Effort program and AMA President Tom E. Nesbitt's call for physicians to limit fee increases.

"Understandably," Dr. Sammons said, "in the absence of a specific legislative proposal, it is difficult to comment in greater detail. For example, we have reservations about a reference to the need for a major reform of the health system without better understanding the details of that reform."

"During the NHI debate, we would urge the private sector to continue to work to expand private health insurance availability and coverage, to maintain quality of care, and to voluntarily restrain the cost of care."

Coup De Grace to Cost Cap

After more than two months of bitter struggle within a seesawing House Commerce Committee the administration's hospital cost control bill has suffered a crippling and probably fatal blow.

The House Commerce Committee has stunned the administration by voting 22 to 21 to remove the threat of federal controls from its measure. The committee then approved 15 to 12 a substitute bill asking hospitals to cut revenue increases by 2% a year and establishing a Presidential Commission to oversee the situation. States would receive financial aid for their own cost control programs if they wish.

Health, Education and Welfare Department Secretary Joseph Califano said the committee action was "a defeat for the public interest and a victory for the special hospital interests." He told a news conference he will talk to congressional leaders "to assess our ability to obtain a meaningful bill from Congress this year." If this can't be done, he said, the administration "will have to take its case to the people and come back next year with a strong proposal."

Even before the committee's vote, the Hospital Cost Containment Act faced rough sledding in Con-

gress, requiring clearance from the House Ways and Means Committee and the Senate Finance Committee where resistance to the concept was strong. The key Commerce vote was believed by most people to kill the bill for this session.

A bitter Califano said the administration has "lost to a very strong and effective lobby." Health provider groups, led by the AMA, the American Hospital Association and the Federation of American Hospitals, were in the forefront of the drive to block the bill.

Commenting on the committee's action, Robert B. Hunter, M.D., AMA Board Chairman, said the AMA "is pleased to learn that the efforts of the private sector, through the Voluntary Effort and other cost consciousness programs, has been recognized by Congress. This kind of coordinated and cooperative effort between physicians and hospitals to cut the rise in the escalation of health care costs is the only responsible approach to the continued delivery of quality health care."

Recent statistics revealed that the Voluntary Effort of the AMA, the AHA, and the FAH was helping to keep hospital cost rises down this year at a rate which makes achievement of the 2% goal this year a clear likelihood. This may have proved a factor in the Commerce Committee vote on the substitute bill offered by Rep. James Broyhill (R-N.C.). Even Rep. Paul Rogers (D-Fla.), chairman of the health subcommittee and champion of the administration's cause on this issue, voted for the substitute, saying we had "to get this matter out of committee . . . let's get it to the floor and let the members vote their conscience there."

Earlier, the administration had been forced to swallow a major compromise—a provision giving the private sector an opportunity to decrease the rate of inflation before allowing for the trigger of mandatory federal ceilings on hospitals' annual expenditures. This trigger was erased on the crucial 22-21 Commerce vote.

Secretary Califano, the administration's chief spokesman, had maintained a steady barrage of invective at hospitals, declaring they are "obese" and suffering from "runaway cost inflation."

Later, Michael Bromberg, FAH executive director, said Califano had "deliberately misled the public when asked about the House action on the hospital cost containment bill."

Bromberg said Califano cited figures on profits for the entire hospital industry and stated they were just for investor-owned hospitals. Califano's statement on television news amounted to a "cabinet officer shooting from the hip with deliberately misleading information," said Bromberg.

Bromberg also said Califano "has impugned the integrity of some of the most outstanding members of Congress by saying the House Commerce Committee sold out to lobbyists."

"The secretary refuses to admit that the committee rejected the bill because it was a bad piece of legislation," Bromberg said.

The administration now pins its dwindling hopes

for a hospital cost control bill on a possible Senate floor fight.

Following the crucial defeat of its plan by the House Commerce Committee, the administration suffered another major setback when the Senate Finance Committee tentatively approved its long-pending measure for changing Medicare-Medicaid hospital reimbursement. None of the administration-sought changes to broaden the plan were included.

An attempt could be made when the Finance Committee bill reaches the Senate to insert the hospital revenue ceiling of the administration, but the struggle would be close and the issue appears dead in the House.

HMO Aid Scaled Down

The Senate has approved a scaled-down measure continuing federal aid for health maintenance organizations (HMOs).

Reports of abuses of the HMO program in some areas led the Senate to adopt financial disclosure provisions and other rule tightening. As cleared by the Senate, the HMO program would be extended for three years with a total authorization of \$170 million. The original request had been for a five-year extension and \$400 million.

There was only one dissenting vote on final passage—by Sen. Carl Curtis (R-Neb.) who said efficient HMOs don't need subsidies and there are "too many instances of fraud and abuse among subsidized HMOs. . . ."

A provision exempting HMOs from certificate of need requirements under planning programs was dropped from the bill and was scheduled to be taken up later when the planning bill comes to the floor.

Sen. Sam Nunn (D-Ga.), chairman of a special Senate investigations subcommittee, held hearings and issued a report this year criticizing past operations of the HMO program and pointing to instances of abuse and inefficiency. He led a successful drive to pare the size of the bill and to include some of the anti-fraud provisions, securing agreement with Sens. Edward Kennedy (D-Mass.) and Richard Schweiker (R-Pa.) on the limiting proposals in advance of the Senate vote.

Speaking in favor of the bill, Sen. Robert Dole (R-Kan.) said that "unless we monitor more closely what we have been doing, we may be supporting a program which in the future could prove to rival the nursing home and Medicaid mill scandals about which we have heard all too much in the past."

The measure, which now goes to the House, would increase the maximum grant or loan guarantee, for an initial HMO project from \$1 million to \$2 million; would allow twice as much in aggregate initial operating loans and guarantees to be outstanding (\$5 million, up from \$2.5 million); relax certain benefit requirements; and establish an HEW Department monitoring system to police the program.

"Voluntary Effort" Alive and Well

A dramatic decline in hospital inflation has "clearly demonstrated that the private sector" can handle the task of curbing rising costs, said James Sammons, M.D., AMA Executive Vice President.

Dr. Sammons and other officials connected with the Voluntary Effort (VE) told a Washington, D.C. news conference that April figures revealed that for the eighth consecutive month the rate of increase in hospital expenditures has been braked.

The private sector "can be proud" that the threat of federal hospital cost controls has not "affected the cost of care one whit," Dr. Sammons said.

"The quality of care continues to be the best in the world," he said.

John Alexander McMahon, AHA president, said the figures demonstrate that the Voluntary Effort "is alive and well." He said the key to the success has been that hospitals and physicians have been able to approach the problem of cost increases in a flexible way most appropriate for the individual institutions involved.

Michael Bromberg, FAH executive director, said the Voluntary Effort is "well ahead of schedule. We can predict success certainly for year one." Bromberg praised the AMA for helping to make physicians "more cost conscious."

The Voluntary Effort, led by the AMA, AHA and FAH, has a goal of reducing the rate of increase in hospital expenditures by 2% a year for the next two years. Hospital costs rose 15.6% last year. For the first four months of this year the annual rate of increase was running at only 12.7%, well within the hoped-for 2% drop.

Resentment was expressed at the Justice Department's failure to give the VE a clear green light of antitrust exemption for its voluntary activities. However, the officials noted that Justice has given no indication that any of VE's activities will face legal challenge from the government.

The statement of the HEW Department to Justice opposing antitrust clearance for the VE was criticized as a "100%, purely political move" by Dr. Sammons.

Bromberg added that "we would have been able to move a lot faster if HEW had offered any help, period." McMahon said Secretary Califano continues to make charges about hospital costs "running wild" despite the progress that has been made in the past several months.

Results of a Voluntary Effort survey showed that 37 states are currently conducting provisional certification programs in their community hospitals with most of the remaining states expected to begin such programs within a month. Provisional certification involves commitment of hospital boards, management, and medical staffs to the state-level voluntary efforts to adopt cost containment principles and programs in their institutions and to provide various data to the state committees to monitor rates of increase.

GAO Says NHC's Overstaffed

The government's \$200 million Neighborhood Health Center program is overstaffed, the General Accounting Office (GAO) has charged.

The GAO, which investigates federal programs for Congress, said the "underuse of physicians, dentists, support personnel and services is costing the six centers investigated to date more than \$1 million annually."

The HEW Department operates 112 community health centers primarily in urban areas. GAO said the annual salary costs for excess primary care physicians at the centers is above \$4 million. Costs for excess supporting staff were estimated to be \$6.3 million.

At 58% of the centers, the average number of patients treated by physicians per hour fell below HEW's minimum standard of 2.7 per hour, according to GAO.

In a report to Congress, GAO said anticipated patient demand on which staff levels were originally based has not materialized, and staffs have not been reduced to levels consistent with demand.

Demand for health services from the Neighborhood Health Centers is not likely to increase beyond present levels and could decline because the population growth of the areas that the centers serve has either stabilized or other sources of health care have become available, the report said.

Medicaid Abortion Funding Regulated

The government has issued rules under which federal funds may be used to pay for Medicaid abortions.

The two physicians who certify necessity of the abortion must be financially independent of each other to eliminate conflicts of interest. Under law, federal funds may be used for abortions only when two physicians certify the mother will suffer severe and long-lasting damage.

The name and address of both the victim of rape or incest and the person reporting the crime must be listed. The law allows federal money for abortions in cases of rape or incest if the crime is reported to the police or public health officials within 60 days. Previous regulations did not require the address of the victim.

When physicians certify the mother's health would be affected without an abortion, the address of the patient must be given to state and federal authorities as well as the name.

The HEW Department said the address requirements will enable HEW and state officials "to ascertain the appropriateness of payments for abortions."

HEW Picks New SS Commissioner

Hale Champion, second-most powerful official at the HEW Department, is in line to be Social Security commissioner. Currently HEW undersecretary, the

55-year-old Champion brings a long background of financial experience to the post which has been vacant since the first of the year.

Though on the surface a step-down for Champion, the Social Security directorship has traditionally been one of the major federal positions, controlling a vast financial operation in government—the disbursing of hundreds of billions of dollars of retirement, Medicare, unemployment, disability and other funds.

Reportedly in line for Champion's key position under HEW Secretary Joseph Califano is 46-year-old Stanford Ross, a tax lawyer and long-time friend of Califano. Ross is chairman of the Social Security Advisory Council.

Champion was California finance director in the 1960s and served for six years as financial vice president of Harvard University.

announcements

CALENDAR OF MEETINGS

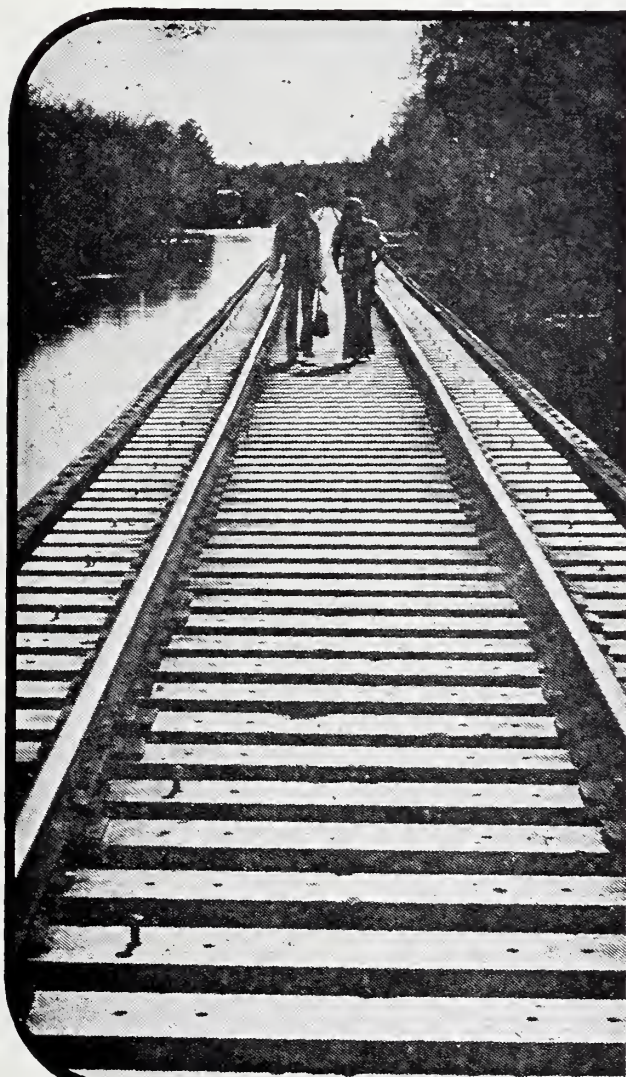
NATIONAL 1978

Oct. 1-6	Civil Aviation Medical Association, Frontier Hotel, Las Vegas
Oct. 4-6	Clinical Orthopaedic Society, Detroit
Oct. 6-8	American Society for Surgery of the Hand, Four Seasons Hotel, Albuquerque, New Mexico
Oct. 10-14	American Medical Writers Association, Fairmont Hotel, San Francisco
Oct. 15-16	American College of Preventive Medicine, Los Angeles
Oct. 15-19	American Public Health Association, Convention Center, Los Angeles
Oct. 16-18	American Association of Public Health Physicians, Los Angeles
Oct. 17-22	Society for Clinical and Experimental Hypnosis, Grove Park Inn, Asheville, North Carolina
Oct. 19-20	Conference on Alcohol, Youth and Public Policy, Sheraton National Hotel, Arlington, Virginia
Oct. 19-23	American Institute of Ultrasound in Medicine, Town and Country Hotel, San Diego
Oct. 20-21	Society for Adolescent Medicine, Chicago
Oct. 21-25	American Society of Anesthesiologists, Chicago
Oct. 21-26	American Academy of Pediatrics, Palmer House, Chicago
Oct. 22-26	American Academy of Ophthalmology and Otolaryngology, Convention Center, Kansas City, Missouri
Oct. 22-26	Association of American Medical Colleges, Hilton Hotel, New Orleans

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|--------------------|---|--------------------|---|
| Oct. 25-28 | American Group Practice Association, Marriott Hotel, New Orleans | | |
| Oct. 28-
Nov. 2 | American College of Chest Physicians, Hilton Hotel, Washington, DC | Nov. 9-11 | Symposium on the Management of Acute Trauma—Hyatt Regency Hotel, Atlanta |
| Oct. 31-
Nov. 4 | American Society of Therapeutic Radiologists, Century Plaza Hotel, Los Angeles | Nov. 11-14 | Southern Medical Association—Georgia World Congress Center, Atlanta |
| Nov. 1-3 | American Hospital Association (Administration of Psychiatric Services in General Hospital)—Chicago | Nov. 12-16 | American Association for Clinical Immunology and Allergy—Americana Hotel, Bal Harbour, Fla. |
| Nov. 1-4 | Society of Nuclear Medicine (Southeastern Chapter)—Birmingham Hyatt House, Birmingham, Ala. | Nov. 12-17 | American Academy of Physical Medicine and Rehabilitation—Hyatt Regency, New Orleans |
| Nov. 2-4 | Central Society for Clinical Research—Drake Hotel, Chicago | Nov. 17-21 | Gerontological Society—Fairmont Hotel, New Orleans |
| Nov. 3-5 | American Association for Hand Surgery—Diplomat Hotel, Hollywood, Fla. | Nov. 26-
Dec. 1 | Radiological Society of North America—Palmer House, Chicago |
| Nov. 4-5 | American Psychiatric Association (10th Biennial Meeting of Area II)—Waldorf-Astoria Hotel, New York | Nov. 29-
Dec. 3 | Southeastern Conference on Alcohol and Drug Addiction—Marriott Hotel Downtown, Atlanta |
| Nov. 5-10 | American Society of Maxillofacial Surgeons, Diplomat Hotel, Hollywood, Fla. | | |
| Nov. 5-10 | American Society of Plastic and Reconstructive Surgeons—Hollywood, Fla. | | |
| Nov. 5-11 | American Association of Blood Banks—Hilton Hotel, New Orleans | | |
| Nov. 8-12 | American Medical Women's Association—Don Cesar, St. Petersburg Beach, Fla. | | |

STATE

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|----------|--|
| Oct. 19 | Middle Tennessee Medical Association—Residence of Dr. Dudley Fort, Seawane |
| Nov. 1-3 | Tennessee Academy of Family Physicians, River Terrace and Civic Auditorium, Gatlinburg |



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The continuing medical education accreditation program of the TMA has full approval by the Liaison Committee on Continuing Medical Education. An accredited institution or organization may designate for Category 1 credit toward the AMA Physician's Recognition Award those CME activities that meet appropriate guidelines. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Ave., Nashville, TN 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

IN TENNESSEE

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman, can plan an individualized program of one to four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, ward rounds, learning individual procedures, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

Participating Departments and Divisions

Allergy & Immunology	Samuel Marney, M.D.
Anesthesiology	Bradley E. Smith, M.D.
Cardiology	Gottlieb C. Friesinger, III, M.D.
Chest Diseases	James D. Snell, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Dermatology	Lloyd King, M.D.
Diabetes	Oscar B. Crofford, M.D.
Endocrinology	David Rabin, M.D.
	David N. Orth, M.D.
Gastroenterology	Steven Schenker, M.D.
General Internal Medicine	W. Anderson Spickard, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.
Medicine	Grant W. Liddle, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Oncology	Robert Oldham, M.D.
Orthopedics	Paul W. Griffin, M.D.
Pathology	William H. Hartmann, M.D.
Pediatrics	David T. Karzon, M.D.

Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Everette James, Jr., Sc.M., J.D., M.D.
Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sergeant, M.D.
Surgery	
Cancer Chemotherapy	Vernon H. Reynolds, M.D.
General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neill, M.D.
Plastic	John B. Lynch, M.D.
Renal Transplantation	Robert E. Richie, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.

Eligibility: All licensed physicians are eligible.

Administrative Fee: \$200.00 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1) and American Academy of Family Physician's Continuing Education accreditation.

Application: For further information and application, contact: Paul E. Slaton, M.D., Director, Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

Continuing Education Schedule 1978-79

Sept. 27-30	Symposium on Diagnostic Imaging
Sept. 29-30	Advanced Cardiac Life Support Course (12 hours)
Sept. 29-30	Symposium on Nutritional Therapy
September, 1978	2nd Annual John S. Zelenik Lecture in Obstetrics & Gynecology (1 hour)
October, 1978	William F. Orr Lectureship in Psychiatry
Oct. 31-Nov. 4	7th Annual Rhamy & Shelley Lectureship in Urology (16 hours)
Nov. 9-10	Symposium on Marital Therapy
Nov. 30-Dec. 1	American College of Physicians Regional Meeting
Dec. 1-2	High Risk Obstetrical Seminar (11 hours)
Jan. 20-21	Comparative Leukemia Conference
Feb. 14-15	1st Annual Harry S. Abram Memorial Symposium on Medical Ethics
Spring, 1979	Annual L. W. Edwards Memorial Lecture in Surgery (1 hour)
Spring, 1979	Annual Barney Brooks Lectureship in Surgery (1 hour)
Spring, 1979	2nd Annual Family Therapy Symposium
Spring, 1979	8th Annual James C. Overall Visiting Professor in Pediatrics
Spring, 1979	Family Practice Intensive Review (40 hours)
April, 1979	American Academy of Orthopedic Surgeons Short Course

April, 1979	Modern Concepts in Oncology
April, 1979	3rd Annual Gynecological Oncology Course (10 hours)
April 26	Annual Frank H. Luton Lecture in Psychiatry (1 hour)
May, 1979	Scientific Sessions of the Vanderbilt Medical Alumni Reunion
May, 1979	18th Annual Seminar in Psychiatry (for nonpsychiatrists) (10 hours)
July 25-29	2nd Annual Symposium on Contemporary Clinical Neurology (16 hours)
August-October, 1979	Internal Medicine Intensive Review (33 hours)

For information contact: Vanderbilt Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

MEHARRY MEDICAL COLLEGE SCHOOL OF MEDICINE

Extended Continuing Education Program

Arrangements have been made with the following services and departments in the medical school to allow practicing physicians to participate in that service's activities for a period of one to four weeks. This program provides an opportunity for physicians to study in depth for a specified period. The schedule of activities is individualized in response to the physician's request by the participating department. The experience includes conferences, ward rounds, audiovisual materials and contact with patients, residents and faculty.

Participating Departments

Anesthesiology	Ramon S. Harris, M.D.
Family Practice	John Arradondo, M.D.
Internal Medicine	
Cardiology	John Thomas, M.D. Kermit R. Brown, M.D. Qamar A. Kahn, M.D.
Chest Disease	Joseph M. Stinson, M.D. Paul A. Talley, M.D. Edward A. Mays, M.D.
Dermatology	Thomas W. Johnson, M.D. David Horowitz, M.D.
Gastroenterology	Ludwald O. P. Perry, M.D. Buntwal M. Somayaji, M.D.
General Medicine	Edward A. Mays, M.D.
Hematology/Oncology	Robert S. Rhodes, M.D. Robert S. Hardy, M.D.
Neurology	Calvin L. Calhoun, Sr., M.D. Gregory Samaras, M.D.
Obstetrics & Gynecology	Henry W. Foster, M.D.
Gynecological Endocrinology	Elwyn M. Grimes, M.D.
Ophthalmology	Axel C. Hansen, M.D.
Orthopedics	Wallace T. Dooley, M.D.
Pathology	Louis D. Green, M.D. John C. Ashhurst, M.D.
Pediatrics	E. Perry Crump, M.D.
Surgery	
General	Louis J. Bernard, M.D.
Neurological	Charles E. Brown, M.D.
Thoracic and Cardiovascular	David B. Todd, M.D. Ira D. Thompson, M.D.
Urology	Marcelle R. Hamberg, M.D.

Fee: \$100 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1), American Academy of Family Physicians Continuing Education Accreditation and Continuing Education Units by Meharry Medical College.

Application: For further information contact Frank A. Perry, M.D., Director, Continuing Education, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

Continuing Education Schedule

October	Cleve Ewell Hematology Seminar (6 hours)
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For information contact Frank A. Perry, M.D., Director of CME, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

UNIVERSITY OF TENNESSEE CENTER FOR THE HEALTH SCIENCES

Continuing Education Schedule 1978-79

This comprehensive listing of UTCHS courses includes programs of the Chattanooga, Knoxville, and Memphis units. The codes (C), (K), and (M) indicate the continuing education unit handling the arrangements for a particular program.

Sept. 28-29	(C)	Current Methods in OB/GYN (12 hours)
Sept. 28-29	(M)	Medical & Surgical Emergencies — Jackson (9 hours)
Oct. 4-6	(M)	Recent Advances in Pulmonary Medicine — Gatlinburg (14 hours)
Oct. 5-7	(C)	Diagnostic Radiology for the Primary Care Physician (15 hours)
Oct. 12	(M)	Clinical Diabetes for Practicing Physicians (Cosponsored by American Diabetes Assn.)
Oct. 12-14	(K)	Office Ultrasound (12 hours)
Oct. 22-24	(K)	Cancer Concepts 1978—Gatlinburg (14.5 hours)
Oct. 26-27	(C)	Emergency Medicine (12 hours)
Oct. 26-28	(M)	Medical Alumni Day
Nov. 2-3	(M)	Clinical Evaluation & Management of Chronic Pain (10 hours)
Nov. 3	(K)	Lupus Symposium
Nov. 7-29	(C)	3rd Annual Perinatal Circuit Course (5.5 hours each)
Nov. 7		Athens Community Hospital, Athens
Nov. 14		Rhea County Medical Center, Dayton
Nov. 21		Copper Basin Hospital, Copper Hill

- Nov. 28 Bradley Memorial Hospital, Cleveland
- Nov. 29 South Pittsburgh Municipal Hospital, South Pittsburgh
- Nov. 11-12 (K) Tennessee Radiological Society Meeting (21 hours)
- Nov. 15 (C) Nosocomial Infections
- Nov. 17 (K) 7th Annual Internal Medicine Symposium (7 hours)
- Nov. 24- (M) Symposium on Cardiovascular
Dec. 9 Disease—Mediterranean Cruise visiting Greece, Sicily, Gibraltar, Tangier, Casablanca and Portugal (35 hours)
- Nov. 30- (C) Nephrology-Urology Update
Dec. 1
- Dec. 8-9 (M) Otolaryngology for the Primary Care Physician (9 hours)
- Dec. 26- (C) Medicine Update '79—Hawaii
Jan. 2 —Departing from Chattanooga (15 hours)

1979

- Jan. 13-20 (K) The Female Patient—Vail, Colo. (20 hours)
- Jan. 25-26 (C) Allergies in Clinical Perspective
- Feb. 3-10 (K) Family Practice Review & Update—Caribbean Cruise — Departing from New Orleans with stop in Havana (15 hours)
- Feb. 7-9 (M) Gynecologic Urology
- Feb. 12-13 (M) Practical Office Dermatology
- Feb. 23-24 (C) Gut Problems: A Clinical Approach—St. Petersburg, Fla. (Tierra Verde) (12 hours)
- March 12-15 (C) Diagnostic Radiology for the Primary Care Physician—Sahara Tahoe, Stateline, Nev.
- March 18-24 (M) Review Course for Family Physicians
- March 29-30 (C) Pediatrics
- April 6 (M) Advances in the Diagnosis and Management of Hypertension
- April 7-14 (C) Infectious Disease for the Clinician — Caribbean Cruise — Departing from Montego Bay
- April 16 (M) Modern Approach to Hypertension
- April 26-27 (C) Orthopaedics
- April 26-27 (M) Pediatrics—Behavioral and Learning Disabilities
- May 7-9 (M) 4th Annual Symposium on Reproductive Medicine
- May 10-11 (C) Rheumatology in a Clinical Practice—Gatlinburg
- May 11-12 (M) Modern Advances in Cancer Treatment

- May 17-19 (M) Practical Otolaryngology for the Primary Care Physician—Gatlinburg
- June 6-9 (M) Basic Electrocardiography—Pickwick
- June 7-10 (C) Family Practice Review Course
- June 11-14 (M) Fundamental Principles of Rhinoplasty
- June 25-28 (C) OB/GYN Emergencies—Orlando, Fla.
- Aug. 23-25 (M) ENT Postgraduate Review

For further information about any of these courses, please call the appropriate individuals below:

- (C) Mr. LeRoy J. Pickles, Chattanooga, Tel. (615) 756-3370
- (K) Dr. Harvey L. Goodman, Knoxville, Tel. (615) 971-3345
- (M) Ms. Grace Wagner, Memphis, Tel. (901) 528-5547

or, write or telephone:

Dennis K. Wentz, M.D.
Director of Continuing Education
University of Tennessee Center for the Health Sciences
62 S. Dunlap St.
Memphis, TN 38163
Tel. (901) 528-5605

EAST TENNESSEE STATE UNIVERSITY Continuing Education Schedule 1978

- Oct. 5-6 Geriatrics—A Team Approach
- Oct. 20 Child Abuse
- October Tennessee State Health Conference (co-sponsored by UT-Memphis, Vanderbilt, Meharry)
- Nov. 6-7 Child Development Clinic
- Nov. 16-17 Adolescent Medicine
- Dec. 4-6 Occupational Medicine
- December Marriage and the Physician

For information contact Dr. Charles F. Johnson, Assistant Dean, East Tennessee State University, College of Medicine, Dept. of Continuing Medical Education, Johnson City, TN 37601, Tel. (615) 929-5364.

IN SURROUNDING STATES

UNIVERSITY OF KENTUCKY Mini-Residencies for Medical and Surgical Practitioners in Office Management Of Emotional Problems

The objective of this course is to give physicians an ideal emotional counseling technique that fits busy office practices. The technique uses a concept of emotions that is consistent with human anatomy and psycho-physiology. Yet, the technique requires

no more physician time or patient cost than routine evaluations of new patients. Finally, the technique is readily understandable and easy for practitioners to apply.

One, two and three week courses. Minimum of 40 hours per week. *Tuition Fee:* \$350 per week for the 1st & 2nd week of training; \$500 for 3rd week of supervised practice with patients in the Intensive RBT Treatment Program.

For further information contact: Maxie C. Maultsby, Jr., M.D., Office of Continuing Medical Education, Dept. of RBT, University of Kentucky, Lexington, KY 40506.

Continuing Education Schedule 1978

Oct. 27-28 Fluid and Electrolyte Balance Made Simple—Hyatt Regency Lexington, Lexington, Ky. *Credit:* 10 hours AMA Category 1. *Fee:* \$75.

Dec. 10-15 Ninth Family Medicine Review (Session III) Hyatt Regency Lexington, Lexington, KY. *Credit:* 50 hours AMA Category 1 and AAFP. *Fee:* \$295.

For information contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, KY 40506.

HIGHLANDS BAPTIST HOSPITAL Louisville, Ky.

Oct. 4-6 Topics in Medical Oncology

For information contact Pat Strait, Symposium Coordinator, 810 Barret Ave., Louisville, KY 40204, Tel. (502) 583-4841, ext. 432.

BOWMAN GRAY SCHOOL OF MEDICINE

Courses in Ultrasound

Three eight-week courses in sonic medicine will be offered at Bowman Gray School of Medicine on the following dates: Sept. 18-Nov. 10, 1978; Jan. 8-March 2, 1979; and April 2-May 25, 1979.

Credit: 30 hours per week in AMA Category 1. Three additional two-day real time courses are offered for obstetricians on Sept. 14-15, 1978; Nov. 16-17, 1978; and March 8-9, 1979. *Credit:* 10 hours per day in AMA Category 1.

Courses in Abdominal Real Time Sonography

A series of six week-long courses on the use of real time ultrasound in abdominal studies will be offered at Bowman Gray School of Medicine on the following dates: Dec. 4-8, 1978; March 12-16, June 11-15, July 16-20, Aug. 6-10, and Dec. 9-13, 1979. *Credit:* 30 hours per week in AMA Category 1.

For information contact James F. Martin, M.D., Director, Center for Medical Ultrasound, Bowman Gray School of Medicine, Winston-Salem NC 27103.

SOCIETY OF GASTROINTESTINAL RADIOLOGISTS

Oct. 12-15 Diagnostic Imaging of the Gastrointestinal Tract—Tan-Tar-A, Lake of the Ozarks, Mo. (cosponsored by American College of Radiology). *Credit:* 13 hours AMA Category 1. *Fee:* \$225.

For information contact Walter M. Whitehouse, M.D., Department of Radiology, University of Michigan Hospital, Ann Arbor, MI 48109.

MEDICAL COLLEGE OF GEORGIA Continuing Education Schedule 1978-79

Sept. 28-30	Intra-Office Communications*
Oct. 12-13	Nutrition
Oct. 16-20	Family Practice Symposium
Nov. 6-9	Laparoscopy and Colposcopy
Dec. 7-8	Family Dynamics
Feb. 8-9	Clinical Psychiatry
March 6-9	Emergency Medicine—Tamarron Ski Resort, Colorado
March 15-16	Reproductive Endocrinology
March 19-21	Neurologic Disorders
March 26-28	Ophthalmology*
April 4-6	Cardiology
April 19-20	Preventive Medicine
May 10-11	The Medical Office Team
June 7-9	Internal Medicine*
July 16-20	Taxes and Investments*
Aug. 6-8	Pediatrics*

*Presented at Holiday Inn of Jekyll Island, Ga.

For information contact Division of Continuing Education, Medical College of Georgia, Augusta, GA 30901, Tel. (404) 828-3967.

OF SPECIAL INTEREST

AMERICAN COLLEGE OF PHYSICIANS

A comprehensive schedule of continuing medical education activities for a 12-month period beginning in September, 1978, includes regional meetings and postgraduate courses to be held at various locations throughout the United States and Canada.

The ACP Regional Meetings, lasting one to four days, are designed for practicing internists and physicians in related fields. They bring new developments in the basic sciences and clinical medicine from major research centers to internists who are unable to travel to medical meetings outside of their state, and also provide a vehicle for local physicians to report to their colleagues on investigative work and clinical experiences in the wide scope of subject areas included in the practice of internal medicine.

The ACP Postgraduate Courses provide the opportunity for in-depth study in fields covered by internal medicine and its subspecialties. Averaging three to five days, they are directed toward practicing physicians and are presented in association with medical schools and other teaching institutions.

For information and registration contact: Registrar, Postgraduate Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

Regional Meetings

Oct. 6-7	Arkansas Regional Meeting—University of Arkansas Medical Center, Little Rock
Oct. 13-15	Florida Regional Meeting—Breakers Hotel, Palm Beach
Oct. 14	Kentucky Regional Meeting—Hyatt Regency, Lexington
Oct. 20-21	Puerto Rico Regional Meeting—Dorado Beach Hotel, Dorado, P.R.
Oct. 24	Indiana Regional Meeting, Marriott Hotel, Clarksville
Oct. 27-28	Southeastern (Ala., Ga., La., Miss., S.C.) Regional Meeting—Savannah Inn and Country Club, Savannah, Ga.
Nov. 30-Dec. 2	Texas Regional Meeting—Texas Academy Chapter, Galveston
Nov. 30-Dec. 1	Tennessee Regional Meeting—Opryland Hotel, Nashville
Dec. 2	North Carolina Regional Meeting—Sheraton Center, Charlotte
Feb. 17	Virginia Regional Meeting—Omni International Hotel, Norfolk
March 16-18	South Carolina Regional Meeting—Kiawah Inn (Kiawah Island), Charleston
May 3-5	Alabama Regional Meeting—Grand Hotel, Point Clear

Postgraduate Courses

Oct. 4-6	Cardiovascular Echocardiography—Houston
Oct. 18-20	Selected Topics in Internal Medicine—Hamilton, Ontario
Oct. 26-28	Clinical Spectrum of Adult Heart Disease—Albuquerque, N.M.
Dec. 4-8	Fluid and Electrolyte Balance, Hypertension and Renal Diseases—Chicago
Jan. 11-13	Recent Advances in Gastroenterology—Little Rock, Ark.
Jan. 22-26	Present Concepts in Internal Medicine—San Francisco
Jan. 29-Feb. 2	5th Stanford-Palo Alto Medical Research Foundation Winter Course in Infectious Diseases, Keystone, Colo.
Feb. 5-9	Intensive Care Medicine—New York
Feb. 12-14	Hematology: From the Laboratory to the Bedside—Lake Tahoe, Nev.

Feb. 14-16	Nephrology: Current Theory and Practice—Montreal
March 5-8	Neurology for the Internist—Rochester, Minn.
March 7-9	Problem Solving in Gastroenterology—Temple, Tex.
March 14-16	Pulmonary Medicine—Update 1979—Denver
March 21-23	Update in Infectious Diseases—Philadelphia
March 22-24	Clinical Recognition and Management of Heart Disease, Drug Therapy—Tucson, Ariz.
April 2-6	Complications of Uremia—San Antonio, Tex.
April 23-27	Diagnostic and Therapeutic Concepts in Endocrinology, 1979—Rochester, Minn.
April 25-27	Advances in the Therapeutics of Internal Medicine—Lexington, Ky.
May 3-5	The First 12 Hours: Emergency Management of the Critically Ill—Toronto
May 10-12	Decision-Making in Clinical Practice—Washington, D.C.
May 16-18	Rheumatology for the Nonrheumatologist—Pittsburgh
May 16-18	Cardiac Auscultation and Cardiac Examination—Rochester, Minn.
June 6-8	Diagnostic and Therapeutic Decisions in Patients with Pulmonary Disease—Chicago
June 7-9	Review of Internal Medicine, 1979—Houston
June 11-15	Advances in Internal Medicine '79—Banff, Alberta
June 27-29	Hepatobiliary Disease and Clinical Practice—San Francisco

BETH ISRAEL HOSPITAL Denver, Colorado

Continuing Education Schedule 1979

Feb. 10-17	4th Annual Vail Family Practice Conference—The Mark, Vail
Feb. 10-17	2nd Annual Vail Urology Conference—Lion Square Lodge, Vail
Feb. 17-24	5th Annual Vail OB/GYN Conference—The Mark, Vail
Feb. 17-24	4th Annual Vail Psychiatry Conference—Lion Square Lodge, Vail
Feb. 17-24	1st Annual Vail Emergency Medicine/Critical Care Conference—Kiandra-Talisman Lodge, Vail
Feb. 24-March 3	9th Annual Aspen Radiology Conference—Aspen Institute for Humanistic Studies, Aspen
March 3-10	2nd Annual Vail Cancer Conference—Kiandra-Talisman Lodge, Vail

- March 10-17 4th Annual Vail General Surgery Conference—The Mark, Vail
- March 10-17 1st Annual Vail Gerontology Conference—Lion Square Lodge, Vail
- March 17-24 4th Annual Vail Internal Medicine Conference—The Mark, Vail
- March 17-24 1st Annual Vail Pediatrics Conference—Lion Square Lodge, Vail

Credit: All meetings approved for AMA Category 1 credit (22 hours for each of the Vail conferences, and 25 hours for Radiology). *Fee:* general registration, \$220; special discount for house officers.

For information, inquiries should be directed to the particular meeting, P.O. Box 11366, Denver, CO 80211.

AMERICAN MEDICAL ASSOCIATION

Medical Staff Leadership Seminars—1978

- Sept. 29-30 Fairmont Hotel, New Orleans
- Nov. 3-4 Eden Roc Hotel, Miami Beach

Credit: 14 hours AMA Category 1.

Fee: AMA member of medical society staff, \$150; nonmember, \$200.

For information contact AMA Department of Hospitals and Health Facilities, 535 N. Dearborn St., Chicago, IL 60610, Tel. (312) 751-6653.

ESTES PARK INSTITUTE

The Estes Park Institute, a non-profit educational organization, will sponsor Hospital Medical Staff Conferences and Hospital Trustee Forums at the dates and locations below. *Credit:* 30 hours AMA Category 1 (each location). *Fee:* \$190.

- Oct. 1-5 Pocono Manor, Pennsylvania
- Nov. 12-16 Pacific Grove, California
- Dec. 3-7 Clearwater Beach, Florida

For information contact Estes Park Institute, P.O. Box 400, Englewood, CO 80151, Tel. (303) 761-7709.

UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER—DALLAS

- Sept. 29-30 Basis for Making Therapeutic Decisions: Update of Common Problems—Zale Lecture Hall, Dallas. *Credit:* 14 hours AMA Category 1; AAFP pending. *Fee:* physicians and pharmacists, \$150; residents and nurse practitioners, \$75.
- Oct. 26-28 Nutritional Components of Common Clinical Problems: Facts, Controversies, and Fallacies—Zale Lecture Hall, Dallas. *Credit:* 15 hours AMA Category 1; AAFP pending. *Fee:* physicians, \$175; residents, \$75.

For information contact Norma Wilcox, A. Webb Roberts Center for Continuing Education, 3500 Gaston Ave., Dallas, TX 75246, Tel. (214) 688-2166.

INTERSTATE POSTGRADUATE MEDICAL ASSOCIATION

- Oct. 23-26 63rd Annual International Scientific Assembly of Interstate Postgraduate Medical Association—Washington Hilton Hotel, Washington, D.C. In cooperation with the Dist. of Columbia Acad. of Family Practice; Univ. of Maryland, Baltimore; Howard Univ. and Georgetown Univ., Washington, D.C. *Credit:* 24 hours AAFP prescribed, 4 hours AAFP elective; also AMA Category 1. *Fee:* \$75 in advance; \$100 at meeting.

For information contact Alton Ochsner, M.D., Program Chairman, Interstate Postgraduate Medical Association, P.O. Box 1109, Madison, WS 53701.

DUKE UNIVERSITY MEDICAL CENTER

- Oct. 23-27 Current Concepts in Diagnostic Radiology including Ultrasound and CT Scanning—Southampton Princess Hotel, Bermuda. *Credit:* 30 hours AMA Category 1. *Fee:* physicians, \$250; in training, \$125.

For information contact Robert McLelland, M.D., Radiology—Box 3808, Duke University Medical Center, Durham NC 27710, Tel. (919) 684-4397.

WEST PARK HOSPITAL Canoga Park, California

- Oct. 14-22 3rd Annual International Body Imaging Conference—Maui Surf Hotel, Maui, Hawaii. *Credit:* 25 hours AMA Category 1. *Fee:* physicians, \$295; residents and technologists, \$195.

For information contact Ronald J. Friedman, M.D., Conference Coordinator, 3rd Annual Int'l. Body Imaging Conference, West Park Hospital, 22141 Roscoe Blvd., Canoga Park, CA 91304.

NETWORK FOR CONTINUING MEDICAL EDUCATION

Schedule for Upcoming Programs

- Sept. 18-
Oct. 1 Abnormalities of Ovulation: Reaching a Diagnosis—with Howard L. Judd, M.D., University of California at Los Angeles School of Medicine.
- Oct. 2-15 The Mental Status Exam: Practical Aspects for the Clinician—with Donald Dalessio, Scripps Clinic and Research Foundation, La Jolla, Calif.
- Selected Nontraumatic Shoulder Syndromes—with Joseph D. Croft, Jr., M.D., Georgetown University School of Medicine, Washington, D.C.
- Guillain-Barre Syndrome—with Richard Walter, M.D., University of California at Los Angeles Medical School.

HILL CREST HOSPITAL

*For Intensive Treatment
of Psychiatric Disorders*

MEDICAL DIRECTOR:
James K. Ward, M.D.

ADMINISTRATOR:
Robert V. Sanders

HILL CREST HOSPITAL

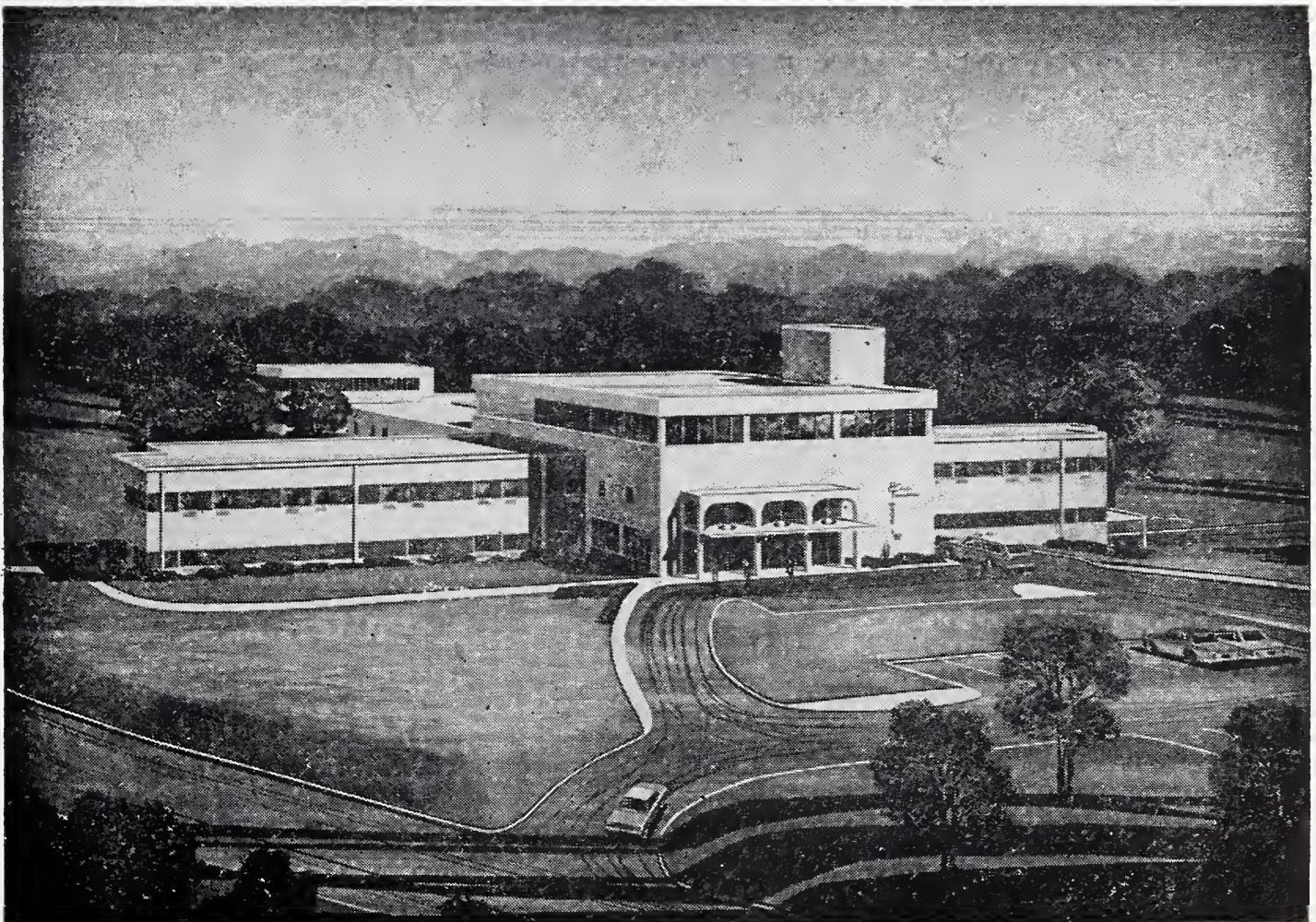
HILL CREST FOUNDATION, INC.
6869 Fifth Avenue South
Birmingham, Alabama 35212
PHONE: 205-836-7201

This 113-bed non-governmental psychiatric hospital provides modern facilities for diagnosis and treatment of patients with all degrees of illness, including those who show severely disturbed behavior. Alcoholic and drug abuse patients are also accepted.

In addition to care by psychiatrists and by consultants in all medical specialties, the treatment program includes occupational, recreational, and physical therapy, social services, and tutoring. Emphasis is on short-term, intensive treatment of voluntary patients.

Hill Crest is a member of: American Hospital Association, National Association of Private Psychiatric Hospitals, Alabama Hospital Association, Birmingham Regional Hospital Council.

Accredited by Joint Commission on Accreditation of Hospitals. Medicare Approved.
Blue Cross Participating Hospital.



Reconsideration of Orchiectomy in the Treatment of Advanced Prostatic Carcinoma

Willis P. Jordan, Jr., MD, Memphis. (*South Med J* 70:1411-1413, Dec 1977.)

The results of a large randomized prospective clinical trial conducted by the Veterans Administration Co-operative Urological Research Group (VACURG) in 1968 are updated and reevaluated. In this study, placebo, diethylstilbestrol (DES 5 mg/day), orchiectomy plus placebo, and orchiectomy plus DES were compared in patients whose conditions were initially diagnosed as stage III and IV carcinoma of the prostate. Results showed that orchiectomy alone or in combination with estrogen did not improve overall survival rates in stage III and IV carcinoma of the prostate. In the two treatment groups receiving estrogen, however, there were fewer deaths due to cancer of the prostate, but this effect tended to be offset by an increased number of deaths due to cardiovascular causes. Deaths from other causes showed no particular pattern with respect to treatment. These studies showed that estrogen is more effective than orchiectomy in preventing deaths from cancer and that addition of orchiectomy to estrogen does not offer any clear-cut advantage over estrogen therapy alone. If cancer symptoms necessitate treatment, initial therapy with estrogen is preferred. Orchiectomy should be reserved for those circumstances in which a patient is not reliable, cannot tolerate estrogens, or has severe cardiovascular disease.

Blastomycosis of Fronto-Ethmoid Complex

Baldev K. Devgan, MD, Manju Devgan, MD, and Charles W. Gross, MD, Memphis. (*South Med J* 71: 191-194, Feb 1978.)

Blastomycosis in children is relatively infrequent. Further, osteomyelitis of the frontal bone, which prior to the antibiotic era occurred more frequently and was mostly due to pyogenic cocci, is rare today. We described a case of frontal osteomyelitis in a child due to blastomycosis which occurred in the absence of frontal sinuses. To our knowledge this rare combination of factors has not previously been reported.

Home Dialysis Program of the Nashville VA Hospital

Derrick L. Latos, MD, Clarence L. Spannuth, MD, and William J. Sonte, MD, Nashville. (*South Med J* 70: 1431-1435, Dec. 1977.)

Since 1965, 330 patients have received chronic dialysis treatment at the Nashville VA Hospital. Home hemodialysis training was established in 1968, and a unique class format has been used since 1970. Despite the national trend of fewer patients beginning home dialysis each year, more than 50% of our patients have chosen this form of therapy yearly since 1969. A total of 182 patients (55%) from 15 states have completed home training with an attrition rate of only 8%. Mean distance of patients' homes from the training center is 185

miles. Five-year survival for home hemodialysis patients is 91%, compared to 59% and 55% for patients receiving renal transplant and center dialysis, respectively. Seventeen deaths have occurred in home dialysis patients, half of which were due to cardiovascular disease. Home dialysis offers an excellent mode of therapy for patients with chronic renal failure and probably is particularly suitable for patients over 50 years of age.

Coordinated Metabolic and Obstetric Management of Diabetic Pregnancy

Frank H. Boehm, MD, Alan L. Graber, MD, and Mary M. Hicks, RN, MSN, FNC, Nashville. (*South Med J* 71: 37-42, Jan 1978.)

Diabetes during pregnancy is associated with insulin resistance, an increase in insulin requirement, and a greater tendency to ketosis and ketoacidosis. Increased perinatal mortality is related to maternal hyperglycemia and can be decreased dramatically with strict control of plasma glucose during pregnancy and a smooth-working obstetrician-internist-neonatologist team. Bad prognostic signs include pyelonephritis, ketoacidosis, toxemia, and poor prenatal care. Timing of delivery is no longer arbitrary at 36 or 37 weeks, but is based upon signs of fetal lung maturation and estimates of fetal risk. Abnormalities in the infant, including congenital abnormalities, biochemical abnormalities, respiratory distress syndrome, and large body weight must be managed in a well-equipped newborn intensive care unit under the care of experienced neonatologists. Strict attention to these principles has resulted in viable infants in the last 36 pregnant diabetic patients delivered at Vanderbilt University Hospital. Therefore, close medical supervision, use of modern obstetric techniques, and the availability of a well-equipped and staffed neonatal intensive care unit can result in a good outcome in this group of patients. Finally, the decision for pregnancy must be carefully considered by the diabetic patient, her husband, and her physician long before pregnancy occurs.

Significance of Hemolytic Streptococci for Nashville School Children: Clinical and Serologic Observations

Robert W. Quinn, MD, Panuel N. Lowry, MA, Nashville, and Roger Vander Zwaag, PhD, Memphis. (*South Med J* 71:242-246, March 1978.)

The results of this study (1969-1971) confirm previous findings that incidence rates for hemolytic and group A streptococci in Nashville school children fluctuate sporadically. During these two years, there was a significant decrease in streptococcal incidence and in typability of group A streptococci. A positive throat culture was not associated significantly more often with symptoms of an infection of the upper respiratory tract than when symptoms were absent. The larger the number of group A streptococci present in the throat culture, the more likely was a streptococcal antibody increase to occur. Nevertheless, some children with small numbers of group A streptococci had an antibody increase, and

the degree of positivity of the throat culture was not a very accurate indication of whether an antibody response would occur. Epidemiologic factors such as age, sex, race, or crowding in the home did not seem to play a highly significant role in rates. Seasonal influences were marked in 1969-1970 but not in 1970-1971. Regarding socioeconomic background, the rates were consistently lower in Clemons school, which serves a predominantly black neighborhood of higher socioeconomic level, than in the other two schools. Our findings confirm that the incidence of acquisition of the hemolytic streptococcus is a continually changing, dynamic process among school children.

Angiography of the Pancreas

Leif Ekelund, MD, and James Gerlock, MD, Nashville. (*South Med J* 71:173-176, Feb 1978.)

The diagnostic potentials of pancreatic angiography are discussed on the basis of four illustrative cases and a review of the pertinent literature. It is concluded that selective visceral angiography properly applied is of great value in diagnosing carcinoma of the pancreas and in determining resectability of pancreatic tumors.

Radiographic Evaluation of Treatment of Advanced Carcinoma of the Prostate

Thipavan Kongtawng, MD, Jeno Sebes, MD, Irving K. Ettman, MD, and Elliot Himmelfarb, MD, Memphis. (*South Med J* 71:247-250, March 1978.)

Radiographic evaluation of 65 patients with disseminated carcinoma of the prostate shows that 8% demonstrated resolution of metastatic deposits after palliative transurethral resection and/or estrogen or castration therapy. The increased effectiveness of therapy and the improved management of patients are reflected in longer survival. Roentgenographic evidence of increasing sclerosis of osteoblastic metastases of carcinoma of the prostate indicates that the rate of bone repair exceeds the rate of bone destruction, and is not necessarily an indication of progression of the disease. Increasing prominence of blastic bony lesions is not a poor prognostic sign; several patients showing it were symptom-free and survived for long periods. Sclerotization of lytic deposits is definitely a good prognostic sign of treatment and represents "healing change" within involved bone.

Immunologic Studies of Colonic Cancer: Evaluation of Immunocompetence

Albert T. Ichiki, PhD, I. Reid Collmann, MD, Kathy L. Wenzel, BS, Takuo Sonoda, MD, and Stephen Krauss, MD, Knoxville. (*South Med J* 71:271-276, March 1978.)

Detailed immunologic studies were done on 29 patients with colorectal cancer. The plasma level of circulating carcinoembryonic antigen, the *in vitro* reactivity of the peripheral blood leukocytes (PBL) to colorectal-tumor-associated antigens (CTAA), and the competence of the T cell population were determined. The *in vitro* reactivity of the PBL to CTAA was determined by a lymphoblastic response and leukocyte migration inhibition. The competent T cell population was determined by enumerating the T and B cells, the rosette-inhibiting

titer of antithymocyte globulin, and the reactivity to skin test antigens. An arbitrary score ranging from 0 (low immunocompetence) to 100 (high) was assigned to the results of each test. The mean score or the immunocompetence quotient (ICQ) which ranged from 22 to 100 was judged to reflect the immunocompetence. The sequential ICQ of individual patients strongly suggested that this information reflected the immunocompetence of patients with cancer of the colon.

Vascular Access for Chronic Hemodialysis: Use of Bovine Xenografts to Create Arteriovenous Fistulas

Robert E. Richie, MD, Edward H. Withers, MD, Michael R. Petracek, MD, and David M. Conkle, MD, Nashville. (*South Med J* 71:386-388, April 1978.)

Adequate vascular access is the hallmark of successful chronic hemodialysis for end-stage renal disease. Between May 1972 and August 1975, it was necessary to use a bovine xenograft in 91 instances to create an arteriovenous fistula for vascular access in patients receiving chronic hemodialysis at the Vanderbilt University Affiliated Hospitals. Forty-two patients had one xenograft, 14 patients had two, and seven had three xenografts. Of all fistulas created with the xenografts, 53% were patent six months after the operation, 36% were patent at 12 months, and 15% have remained patent for 24 months. Thirty-seven percent of the xenografts failed during the first three months after operation. The most common reason for failure was thrombosis of the xenograft. Other complications encountered were false aneurysms, infection of the graft, ischemia of the extremity, and bleeding. Amputation of the lower extremity due to ischemia from septic emboli was necessary in one case. There were no deaths directly related to the use of these xenografts. It is our current opinion that the bovine xenograft should be reserved for use in patients who have had failure of the more conventional type of internal fistula (Cimino type). In selected patients in whom it is not possible to create a Cimino shunt, the xenograft offers adequate primary vascular access.

Treatment of Leishmaniasis with Sodium Antimony Gluconate: Transient ECG Findings

Robert J. Kaplan, MD, Jonathan K. Wilkin, MD, Memphis, and Donald L. Hartman, MD, Oak Ridge. (*South Med J* 71:469-470, April 1978.)

Americans entering endemic areas may acquire cutaneous leishmaniasis, and unless the diagnosis of leishmaniasis is considered, these patients may be misdiagnosed and treated as having bacterial infections. Whereas some types of leishmaniasis are considered by some authors to be self-limited and not requiring therapy, most authors accept the need to always treat lesions acquired in the Amazon because of the risk of espundia. Sodium antimony gluconate is the current drug of choice obtainable from the Center for Disease Control in Atlanta for lesions caused by *L. braziliensis*. We report the successful treatment of a patient with cutaneous leishmaniasis with sodium antimony gluconate, in which the only evident side effect was a transient, minor T wave abnormality.

AMA Publishes New Edition Of Health Reference Guide

Special reports on emergency medical services, health care in Canada, foreign medical graduates in the United States, and the economics of rural medical practice are among highlights of the seventh annual edition of *Socioeconomic Issues of Health*.

The AMA's quick reference guide to facts and statistics on the socioeconomic aspects of medicine and health care is off the press.

Formerly known as, "The Blue Book," the 243-page book is used as a reference guide by health professionals, policymakers, researchers and journalists. It brings together in one convenient source a combination of essays and current data concerning the health care delivery system.

Data in *Socioeconomic Issues of Health* are gathered largely from government and private sources outside the AMA by the staff of the AMA's Center for Health Services Research and Development. A companion publication, "Profile of Medical Practice," is based on data gathered by the AMA's Center. A new edition will be out later this year.

The book includes 25 figures on general population data, vital statistics, national health expenditures, hospital bed census, private health insurance, and medical school graduates. Some 56 tables cover additional information on vital statistics, health professions, life expectancy and related data.

Copies of the book are available by mail from Order Department OP-51, American Medical Association, P.O. Box 821, Monroe, WI 53566. Individual copies cost \$5.

Last Chance Diet Called Dangerous

The "Last Chance Diet" of liquid protein-supplemented fasting to lose weight is dangerous and should not be used. There are safer alternatives to the liquid protein diet that are equally effective and nutritionally more rational. But, in any case, no drastic weight reduction regimen makes sense unless adequate provision is made for subsequent maintenance of weight loss." It is not possible to ignore the growing indications that prolonged use of the liquid protein diet is hazardous and potentially lethal.

Officials of the Food and Drug Administration and the Center for Disease Control are currently investigating 46 deaths associated with the use of liquid protein diets. These unnecessary deaths are a somber reminder of the tragic consequences that

can occur when therapy outstrips its research base. It appears that the liquid protein materials were never tested in appropriate laboratory animals to determine their safety for prolonged use for weight reduction.

The July issue of the *JAMA* carries two scientific reports of a total of three deaths among four female patients who had adhered faithfully to a liquid protein diet for five to six months. Heart problems caused the deaths. Strict protein-sparing modified fasting is not without risk of sudden death even with close medical supervision. Caution should be exercised in the use of liquid protein diet for weight reduction in obesity.

Lung Cancer Film For the Medical Profession

The American Cancer Society has produced a film for physicians entitled "The Physician's Role in the Control of Lung Cancer." This film:

- summarizes the expanding incidence of lung cancer, the latest measures for therapy, and today's end results;
- identifies cigarette smoking as the principal cause and *quitting* as the only current means for significant control;
- presents a lively discussion between two physicians—one a smoker—over the prospects of sputum cytology and frequent x-rays for earlier detection in smokers;
- follows their debate on the physician's role in influencing behavior with a demonstration of one of them persuading a patient to try to stop smoking;
- identifies some real problems facing patients who want to quit;
- demonstrates the role of the physician's staff in advising the patient on a practical quitting program;
- identifies the physician as an *authority* who sees patients when they are receptive to medical advice.

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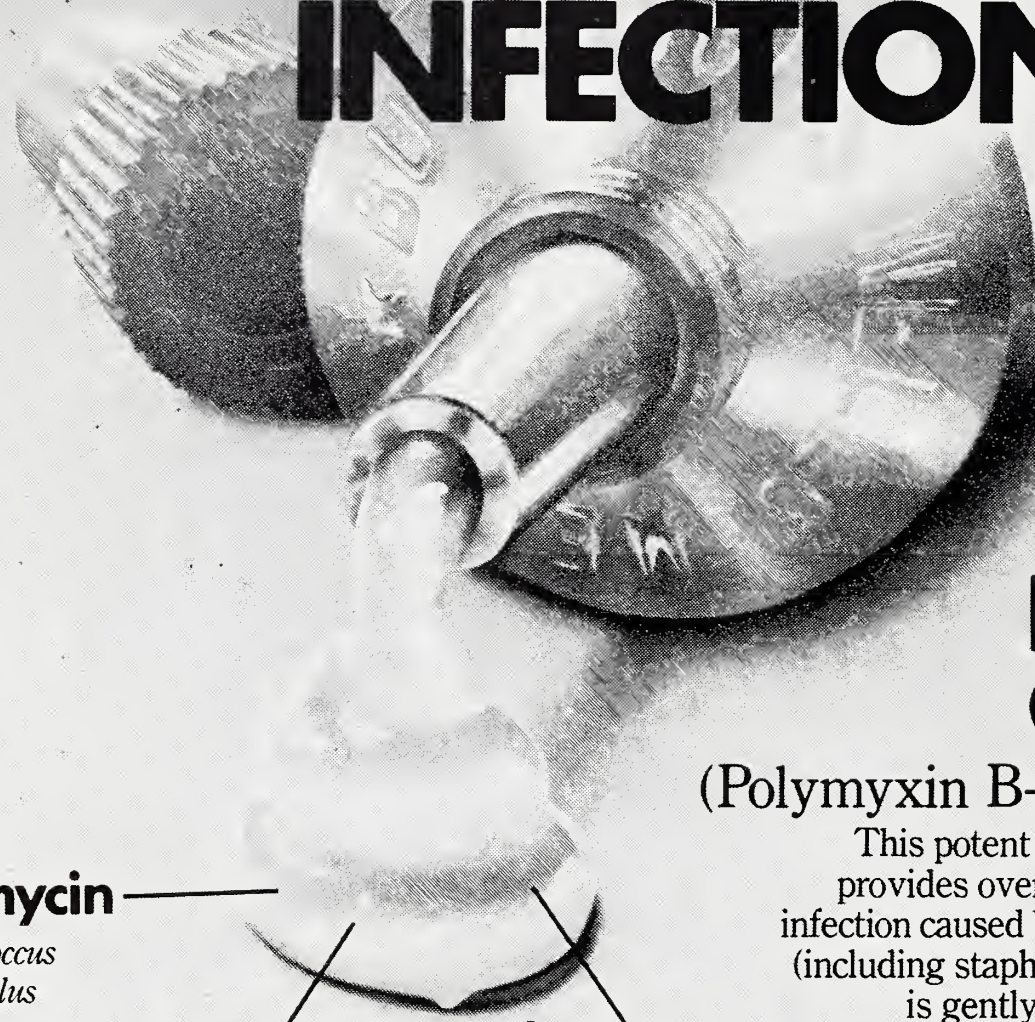
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Complete literature available on request from Professional Services Dept. PML.

Oral Contraceptive Steroids and Dysplasia and Carcinoma of the Cervix Uteri

A. W. DIDDLE, M.D.; WM. H. GARDNER, M.D.; P. J. WILLIAMSON, M.D.
J. R. JOHNSON, M.D.; J. L. HEMPHILL, M.D.; and C. W. GODWIN, M.D.

There continues to be sporadic interest concerning the use of oral contraceptive steroids and their possible carcinogenic effect on the cervix uteri.¹ For this reason some of our experience on the subject is given to help clarify the question.

Method

Subjects:

During years 1973 through 1975, a total of 8,686 consecutive women were examined one or more times. Of these, 1,267 were excluded because their contraceptive history was incomplete. This left 7,419 subjects for study, 4,942 who took oral contraceptive steroids and 2,477 who never took these drugs. The age range was 14 to 46 years. Nearly 98% were Caucasians, the remainder were of various minorities. Each patient had been followed for a period of time from less than a year to 24 years. Nearly all were or had been sexually active. Each had a complete physical examination including uterine cytology and urinalysis. Initially those with invasive cancer had been referred or sought consultation for treatment because of abnormal symptoms.

In order to ascertain the most complete analysis of the relationship between the use of oral contraceptive steroids and dysplasia and carcinoma of the cervix uteri, detailed analyses were performed on all appropriate data. Rates in this study are presented in both crude and adjusted form. The method of Linder and Grove was used

for these adjustments. For comparing adjusted rates the approach outlined by Mantel and Haenssel was used. For all crude data, statistical significance was determined using the chi-square test of significant differences among proportions.

Diagnosis:

Most of the dysplasias and carcinoma in situ lesions were suspected by previous cytologic studies. The diagnosis of dysplasia or carcinoma was substantiated by biopsy.

Contraceptive Drugs:

Oral contraceptive drugs were prescribed on request by the patient as described in a previous communication² (Table 1).

Definition:

We belong to the school that believe that dysplasia of the cervix is often an early manifestation of the disease process of cancer of the cervix. The fact that not all dysplasias result in cancer, in our opinion, is not an argument against this opinion.

Results

Pathology:

A total of 158 women had either dysplasia (42 cases) or carcinoma of the cervix (116 cases). Eighty-four had previously taken oral contraceptive drugs, and the other 74 had not received these medications. None acquired invasive cancer while under our care. Only two treated women had invasive lesions. Both of these growths were

From the Memorial Research Center and Hospital, University of Tennessee and Fort Sanders Presbyterian Hospital, Knoxville.

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microinvasive to a depth less than 3 ml below the basement membrane (Table 2).

All but 12 treated women acquired abnormal cytology leading to the diagnosis of dysplasia or carcinoma in situ of the cervix while under our care. The 12 had received Pap smears elsewhere within one to two years previously. The history was comparable for untreated patients, that is, dysplasia or carcinoma in situ were generally identified cytologically and proven by biopsy in the course of sequential periodic physical examinations.

All pathologic lesions were of the squamous variety, except for two in untreated women. One of these growths was an adenocarcinoma of the cervix and the other a mesonephric carcinoma.

Type of Medication

The proportion of treated women with dysplasia or neoplasia of the cervix varied significantly ($P < .05$) according to the type of drug taken. The proportion of patients with dysplasia or cancer was significantly higher for those women taking medroxyprogesterone with ethinyl estradiol and norethindrone with mestranol than the proportion of women using other contraceptives. On the contrary when age of the patient was taken into account there was little, if any, significant

relation of the incidences of dysplasia and cancer of the cervix to the use of the various oral contraceptives.

Age of Patient:

The mean age of treated women with dysplasia was 31.1 in contrast to 32.4 years for the untreated patients. The corresponding figures for carcinoma in situ were 29.0 and 33.3 and for invasive cancer 32.5 and 34.3 years. In each group the youngest patient with either intra-epithelial carcinoma or invasive cancer was respectively 21 and 17 years (Tables 2 and 3). The proportion of treated women with cancer did vary significantly ($P < .01$) according to age of the women. As expected more women over 30 years old had cancer than did women 30 years old or less.

The crude rates of incidence of cancer and dysplasia were 17.0/1,000 women using contraceptives as opposed to 29.8/1,000 untreated women. The age-adjusted rates of the incidences were 22.8 and 24.1 respectively. The higher adjusted rate for treated women (22.8) than the crude rate (17.0) indicated that the treated group had an age distribution favorable to a low incidence of dysplasia and cancer. The age-adjusted incidence rates for dysplasia and neoplasia of the cervix were not significantly different between treated and untreated women.

TABLE 1
ORAL CONTRACEPTIVE STEROIDS

Combination Drugs	Total Treated	No Cervical Pathology	Dysplasia or Neoplasia of Cervix Uteri
Norethindrone with mestranol*	874	846	28 (3.2%)
Norethindrone acetate with 0.05 mg ethinyl estradiol†	775	769	6 (0.8%)
0.5 mg norgestrol with 0.05 mg ethinyl estradiol	753	745	8 (1.1%)
1 mg ethynodiol diacetate with 0.1 mg mestranol	599	585	14 (2.3%)
25 mg dimethisterone with 0.1 mg ethinyl estradiol	305	297	8 (2.6%)
1 mg ethynodiol diacetate with 0.05 mg ethinyl estradiol	218	215	3 (1.4%)
2.5 mg norethyndrol with 0.1 mg mestranol	163	161	1 (0.6%)
Medroxyprogesterone with ethinyl estradiol	23	22	1 (4.3%)
Drugs unspecified	528	514	14 (2.7%)
All above drugs variously represented‡	704	702	2 (0.3%)

*Approximately equal number were given 100, 80 and 50 mg potency.

†Approximately half were given 2.5 and 1.0 mg content norethindrone acetate.

‡No follow-up. Two of these had neoplasia before progestogens were used.

Gravidity:

The percentage of multigravidas in treated and untreated women was 53% and 71% respectively. The corresponding figures for dysplasia were 79% and 86%; for carcinoma in situ nearly 90% for each group; and for invasive lesions 100% and 81%.

Time on Medication:

Table 4 correlates the number of women with either dysplasia or carcinoma in situ in relation to time on medication. The majority of women,

where the duration of treatment was unknown, were less than 25 years old.

The proportion of patients with dysplasia and cancer of the cervix was significantly different ($P < .01$) among the periods of duration of treatment. The incidence of cancer in woman using oral contraceptives for more than three years was higher than in those who had used these drugs less than three years, probably because those treated more than three years were on the average older than those treated for a shorter time.

Continued on page 740

TABLE 2
DYSPLASIA AND CARCINOMA OF CERVIX UTERI BY
AGE GROUPS IN WOMEN TREATED WITH ORAL
CONTRACEPTIVE STEROIDS

Age Group (In Years)	Total Treated	No Pathology	Dysplasia	Intraepithelial Cancer	Invasive Cancer
14-20	1,546	1,544	2	0	0
21-25	1,933	1,912	7	14	0
26-30	856	827	9	19	1*
31-35	350	332	6	12	0
36-40	165	155	2	7	1*
41-46	92	88	1	3	0
TOTAL	4,942	4,858	27	55	2

* Microinvasive

TABLE 3
DYSPLASIA AND CARCINOMA OF CERVIX UTERI BY
AGE GROUPS IN UNTREATED WOMEN

Age Group (In Years)	Total	No Pathology	Dysplasia	Intraepithelial Cancer	Invasive Cancer
14-20	470	467	1	0	2
21-25	595	588	0	5	2
26-30	511	493	7	7	4
31-35	382	368	2	7	5
36-40	265	252	3	6	4
41-46	254	235	2	7	10
TOTAL	2,477	2,403	15	32	27

TABLE 4
DURATION OF TREATMENT WITH ORAL CONTRACEPTIVE STEROIDS
CORRELATED WITH DYSPLASIA AND CARCINOMA OF CERVIX

Time (In Years)	Total	No Cervical Disease	Dysplasia	Intraepithelial Cancer
1 yr or less	3,874	3,858	9	7
1-3 yrs	2,241	2,201	11	29
more than 3 yrs	718	696	6	16
Exact time questionable	1,046	1,042	1	3

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Overview of Psychiatry: An Editor's Viewpoint

FRANCIS J. BRACELAND, M.D.

Dedication

I am honored, indeed, to give this 1978 Frank H. Luton Lectureship, for in addition to my great respect for him and the excellent work that he has done in psychiatry, not only in Tennessee but in American psychiatry in general, he has also been a dear friend and colleague of mine. We have been contemporaries. I have watched him in his various ventures in hospitals, in the university, in his medical society and in the American Psychiatric Association, and always he could be counted upon for sensible, hard work and dedication to medicine and psychiatry. His main concerns throughout a varied and honored professional career have been family, medicine, psychiatry, and his country. He has been devoted to all of them and is a highly respected associate, and, in addition, is beloved by all who know him well.

You have heard that very soon I shall rise from my editorial chair and become an ex-editor after 13 years. I hope to assume some function with the Journal [*American Journal of Psychiatry*] depending on the new editor and the editorial board. I have asked not to be put at the bottom of the editorial page as yet, for those eight, my predecessors, have already arrived at the particular portion of Valhalla which is reserved for used editors. They were conducted there by the Valkyries and I too expect to end there, but I have several jobs to do first. One is to give a valedictory address in a few weeks; in other words to give an account of my 13-year stewardship. Then I think I may even become

Presented as the Frank H. Luton Lectureship, Vanderbilt University, Nashville, Tenn., April 27, 1978.

Dr. Braceland has recently retired after 13 years as editor of the *American Journal of Psychiatry*, during which time he has also been and continues to be senior consultant and chairman of Planning and Development of the Institute of Living in Hartford, Ct. He was previously psychiatrist-in-chief of the same institution following a six-year tenure as consultant in psychiatry and head of the section at the Mayo Clinic at Rochester, Minn. He was in the private practice of psychiatry from 1938-1941, following which he was dean of the School of Medicine and professor of psychiatry at Loyola University in Chicago until his entry into the Navy during World War II.

emeritus.

Those of you who are latin scholars will recognize the term, *emeritus*: the "e" meaning *out of* (that is where "ex" comes from); the "meritus" meaning *to merit it*—taken together it means that he is "out of it and he damn well merits being out of it." But, I don't mind, I'll just look for another job. I can't get one at the APA because I've had them all. I thought I might apply for the job of coroner for a hockey team. It's like being retired; the boss at the banquet gives you a gold watch and the accountants give you the works!

Seriously, you are aware of the fact that I, having been an editor for 13 years, could have no original research and no great clinical discoveries to report to you. The only thing I do have is an opportunity to read what you and your colleagues in the specialty of psychiatry write. Some of you may have gotten a letter from me which says your paper is both good and original, etc. . . . and I hope by now you have forgiven me. One has only to scan the titles of the offerings in order to realize that our specialty, like that of its parent discipline, medicine, is in trouble. I am of the genre which Richard Hewitt¹ called "amateur editors," who, while we do not devote full time to the job, nevertheless, he says, are useful. "Commonly such an editor is eminent in some field of medicine. He is likely to know personally authors who are writing in the field and is aware of their soundness or unsoundness. . . . Consequently he is in a position to solicit papers from desirable authors and pass judgment on their manuscripts, etc." This describes many of the editors of medical and surgical journals in the United States today.

Mencken, a famous literary editor, thought editors are looked upon in some ways as enviable fellows whose offices are pleasant beyond average—and there is some truth in this. The editorial chair may not be exactly soft, but it is tolerable to the hinder parts, and it is propped high enough

above the common level to fan the ego of anyone who would be masochistic enough to tackle the job. Within the limits of his reach, Mencken said, the editor is almost as puissant as a bishop, and he can bind and loose with the same free hand. Writers are generally polite to him at least to his face. His main job is to satisfy his readers and get his journal out on time.

Occasionally the editor gets a letter which casts doubt upon his competence and fears for the future, not only of his journal but also for the future of his specialty, for he is apparently leading it to hell in a hand-basket. Sometimes letter writers may even cast doubts about the legitimacy of the editor's birth. However, in this presentation I shall proceed to "try to unscrew the inscrutable" for you and, in the words of Calvin Linton,² "make problems out of every solution, exhibit a firm grasp of facts which do not matter, and display a brilliant ability to make the subject uninteresting." From the same source I tell that "my job is to talk and yours is to listen, and if you get through before I do, simply raise your hand."

Seriously, in order to orient ourselves in the milieu in which we practice, let us first recall that every society requires that its physicians have knowledge, skill and devotion to patients, along with responsibility and dependability—in fact, all qualities which make possible the compassionate care of the sick. But the position of the physician in society, the task assigned to him, and the rules of conduct imposed upon him, change in every period. As Sigerist³ noted:

The physician was a priest in Babylonia, a craftsman in ancient Greece, a cleric and a scholar in early middle ages. He became a scientist with the rest of the natural sciences, and it is perfectly obvious that the requirements put upon the physician and the task of medical education were different in all of these periods. We must keep in mind that the picture a society has of its ideal doctor—and the goal of medical education—is determined primarily by two factors: the social and economic structures of that society and the technical means available at that time.

Oliver Wendell Holmes⁴ said practically the same thing in his *Medical Essays*: "The truth is that medicine professedly founded on observation is as sensitive to outside influences, political, religious, philosophical imagination, as the barometer to the changes of atmospheric density." I might say somewhat ruefully that there are more changes in the offing although now lawyers and

judges tell us who we can hospitalize; a committee tells us how long we can keep them; and an insurance company decides whether or not the hospital will be paid.

It is quite important to keep all of this in mind at present, for we live in a period marked by the most rapid changes experienced by man, and understandably medicine and psychiatry are deeply involved in the changes. Something is happening to the whole structure of human consciousness and the older ideas, practices, morals, dedication and beliefs which sustained many of us are now being called into question. A new, even if somewhat dubious, kind of life is starting, and in the face of the present upheaval none of us can remain indifferent. Some of these things I have talked about before, but they must be reiterated regularly. In doing so I will imitate the old preacher who, when found repeating himself, simply took an old sermon and hollered louder in different places.

As to the nation at large, the confidence of the citizens has been rudely shaken as indictment follows indictment in top officials. We are regularly made privy to the confidences, stolen, leaked or even made public by congressional committees, and the airing of some secrets has ruined our credibility abroad. The evening news brings lurid details of various happenings into our living rooms, interspersed with news items and sometimes punctuated by indelicate advertising in which people confide the erratic actions of their recalcitrant colons, while others advise them of remedies which work while they sleep; and then, too, many of them take Geritol. Bruce Bliven,⁵ in his 86th year, describes how he and his wife spend many happy hours before their TV, though they rarely turn it on because when they do, he says, they often hear reports of people telling one another how they smell.

Tinder boxes still do exist on all continents and when one conflagration is tamped down, another arises like a Jack-in-the-Box. We recall that 2,000 years ago Hippocrates wrote in his book on Humors: "It is changes that are chiefly responsible for diseases, especially the greatest changes, the violent alterations both in seasons and in other things;" and we can certainly agree that great change and uncertainty have been the nation's steady diet for more than a decade.

As the nation changes, medicine, which is practiced within its boundaries, has also had to change. The social legislation which passed in

the mid-sixties represented a postwar adjustment with a shift from agrarianism in society to a more complex urban society. Of this Chapman⁶ notes:

Consequently a reformation in health services confronts physicians who have long enjoyed a respected position in providing care for those who assumed personal responsibility. Now that society has assumed responsibility, proof of competence is demanded from the physician receiving payment for service. Thus, unless present methods of continuing medical education are strengthened, government threatens to control their education and demand licensure of physicians based on periodic reexamination.

The question nationally then is, will medicine see to the maintenance of standards especially in continuing education, or will it surrender this prerogative to government?

Along with these changes we might note another factor which influences medical practice. In general, America seems to have lost its heroes, due in part to scandal in the high places, but due as well to the general debunking spirit which is manifest in this rationalistic age. Unfortunately, with this spirit there is a pervading cynicism abroad and a false egalitarianism that seems to be comfortable only when all are believed to be reduced to a single standard of mediocrity. All people must be equal. Medicine, which is in its golden age of scientific accomplishment, has not entirely escaped from this leveling process.

Part of a profession's self-maintenance lies in its public image, and the American public at present is of two minds in regard to its doctors. In general, the families' personal physicians are held in high regard, some even in affection, and in general the profession of medicine itself ranks highest in public admiration. Yet as a group we have slipped several notches in public regard, and we are roundly castigated by labor and political orators for the deficiencies in the system of health care, and most people in general are quizzical. What they read and what they hear, and perhaps what they have experienced, causes them to be unhappy about the profession on a number of counts.

Recently a columnist, Ellen Goodman, entitled her column, "Have We Become Medical Atheists?" There was a time, she said, when doctors explained very little and patients trusted very much. Now, having been supplicants of doctor worship, we're becoming a nation of medical atheists. Having discovered that medical people are fallible we've lost our faith altogether. It isn't just skepticism that's replaced our former belief—it's rampant distrust.

The old understanding between doctor and lay community has broken down increasingly into an adversary relationship. To a large degree, doctors have been responsible. Too many have played God when they were really "The Wizard of Oz," hiding their doubts behind a curtain, uttering certainties from a larger than life public image.

The image of the devoted family doctor of old is replaced in many minds by particularly efficient scientists much better equipped than the old family doctor but often in a hurry and sometimes brusque as well as affluent. All of this is regarded as inappropriate and even unethical in a profession which holds itself, and is held, as interested in humanitarian goals.

Franz Ingelfinger⁷ states that "News accounts naturally stress the sensational;" the doings of the deviant doctor are so disproportionately advertised that they lead to erroneous generalizations. Or the alleged medical breakthrough is so over-emphasized that a patient's distrust of the physician is compounded when he finds that medicine is still not much more effective than it has ever been in relieving his chronic complaints. Granted that the interests of politicians in all aspects of health care are entirely appropriate—after all, Ingelfinger points out, some "\$30 billion of the taxpayers' contribution supports that care. But it is politically more expedient for a public figure to dwell on what's wrong rather than what's right with medicine and its practitioners. Interestingly enough, many of the charges made in the media or on Capitol Hill are based on self-criticisms by members of the medical profession itself."

Also part of the decline in public confidence has been what seems to be a characteristic of professions, medicine particularly—their obvious unwillingness to try anything new. This is unfortunate when the life of the profession may be at stake. Certain diseases are autodestructive, and one wonders about the possibility of the suicide of the honorable profession of medicine if mulishness is its major reaction.

What is to be done—that is the question. Apparently little can be done on a short-term basis. We are in for a long winter of discontent as the government makes up its mind as to how it will act. During this hiatus, however, it is vitally necessary for the profession to take stock of its directions and note how they can be modified with practical proposals which might prevent disaster.

While my story thus far may sound lugubrious, and even funereal, the outlook is not altogether

one of gloom. While we in psychiatry will have little to say in regard to general medicine's reaction to its problems, we can see possibilities that out of the present disturbing shambles there is the possibility that a new psychiatry is arising like the phoenix—a psychiatry based on a much firmer foundation.

Really trouble is nothing new for us as a specialty. We are, as Milton Greenblatt has said, "The battered child of medicine." Born in witchcraft and demonic possession, feared by the public, scorned by the family of medical specialties, dependent for much of its existence on handouts from public agencies—psychiatry has always had a hard life. Psychiatry's patients indeed have been abused, villified, denied, concealed and deserted. They have been history's "stepchildren," treated contumeliously in each generation. The laws concerning them have gone through numerous gyrations, from hanging them as witches in colonial times through periods of neglect, until today they are legislating them out of hospitals and out of badly needed care, relegating them to community ventures—many of which we must sadly admit are not yet prepared to take care of them. At the moment, much of this is being done in the name of the "patients' civil rights," and the fact that this procedure might be turning the clock back 100 years does not enter people's minds. A century and a half ago many of these sick people were on the streets, in prisons, garrets, and cellars, and were often the rude sport of small boys. Today in several of our large cities they are on the streets again, uncared for, unfed, and the subjects of unscrupulous people—thieves, muggers and murderers. But that is being overlooked because they have been "saved from hospitalization," and some of them are even being murdered "with their civil rights intact." All of us must always keep in mind the fact that a person's civil rights are precious and must be protected, but among those rights are the rules of humanity which direct that they should be cared for and protected when they are ill and unable to properly care for themselves.

Despite the battering which psychiatry has taken, it has called the attention of the nation and of medicine in general to the short shrift which has been and is being given to the emotionally and mentally ill, along with the retarded and other social casualties. The discipline has written openly about its own shortcomings and

they are there for all to read. This is done not in any spirit of self-flagellation but to warn our colleagues away from clinical and research shoals.

Psychiatry knows better than others the defects in many of the state hospitals, but it knows also who and what caused those defects, and it wasn't psychiatry. In many instances it was the none-too-unselfish hands of politics and in some instances it was because they were neglected and starved by state legislatures for reasons too involved to discuss here. Unfortunately, we as citizens allowed it to happen. The obvious thing to do was to fix these institutions and make them habitable and staff them properly; but instead, in several states, a number of them are marked for closing. If you have ten little boys and only nine hats, you don't cut off the head of the tenth little boy; you look about for a head covering of some sort. Not so with hospitals! You don't fix them—you close them. Mind you, I'm willing to see them closed if someone will assure me that the communities are set up to take humane care of the sick, poor patients who are being turfed out of them and that a whole host of mini-state hospitals, or flea bag hotels, won't come into being to replace them. If any of this seems to be a regressive stance on my part, please note my willingness to change with alacrity once I see evidence to the contrary.

There is no need for me to go back over the report of the Joint Commission on Mental Illness and Health and the plans made to implement the report. From it, you recall, came the idea of mental health centers. President Kennedy's expressed idea was to bring mental illness and mental retardation "back into the mainstream of medicine." I was a member of that Commission and later chairman of a committee to lay out the ground rules for the community mental health centers. The object of the centers, as we visualized them then, was to see that blue collar workers and people in low-income brackets could get psychiatric help without being shipped off quickly to state hospitals. Though physicians always have been aware that poor housing, unemployment, malnutrition and economic and social deprivation placed scars on the bodies and spirits of deprived individuals and that these evils cried out for correction, it was the rise of community mental health centers that brought these evils into stark visibility.

Due to various complicated factors, a number of community centers changed their complexion and took on a sociologic visage. Their functions

changed, and along with this process the role of the psychiatrist changed. In some instances a democratic and egalitarian multidisciplinary team took over to conduct them. Understandably, some of the mental health professionals working in community centers became confused as to their goals. Were they there to treat or prevent mental illness or simply sign prescriptions, or was their function to eliminate poverty, racism and prejudice? Some seemed to be saying that if these evils could be eliminated, mental illness and psychosomatic disorders would disappear. Now every doctor worthy of the name knows that the evils mentioned are wretched and they should be eliminated, but most psychiatrists might wonder whether their background training of learnings to treat the emotionally and mentally disturbed individuals really fitted them for this admittedly larger and more difficult task.

Mind you, it is quite possible that resolving some of these basic inequities could exert an ameliorative role even greater than that which mental health workers could accomplish, but I agree with those who think it would be fallacious for psychiatrists to believe in their responsibility to undertake the altering of these societal defects. As citizens and as public health officers they can, of course, call attention to these hazards that blight human lives, but they are not trained for the task of trying to eliminate evils that are overwhelming in their complexity. Psychiatry cannot bring happiness, prescribe the good life or legislate morality, but it can bring to bear an increasingly powerful and technical framework in the mitigation of that type of human suffering rooted in biomedical derangement. However, we have to have a realistic appraisal of our capabilities.

Lest you believe me to be unduly critical, I should pause here to tell you how I really feel about community mental health centers. As I mentioned, I was intimately connected with helping to bring them into being. True, I did not foresee the directions they would take but I realize that the communities must have a say as to what they want their centers to be. It is the day of the consumer. If patients are cared for near home, I know it is so much better than their being warehoused at a distant place. But I had some fears about the situation. I feared that many psychiatric patients would not go to the centers on their own after discharge from hospitals. Who would be there to see that they did go, and who would see that they took their

medication when it was prescribed for them? Maybe those fears are justified and maybe they are not. Some centers certainly have solved the situation by now. However I have still another fear. When the federal government stops funding the centers and the costs devolve upon the states and the communities, will the latter support them? I hope so. In some cases they will, but I am not at all sure about others. Remember that Dorothea Dix spent her life in the middle of the last century haranguing legislatures to open state hospitals because communities would not take care of their mentally ill, and in fact, in those days, they "warned" many of them out of town and banished others. People have changed and maybe they will support them now, but to my mind people who are already highly taxed to the point where they are defeating school construction and improvement bonds, and who are faced with inflation and recession and an unemployment rate at its highest, will think hard about it. In Connecticut people were without bus service for several months because they objected through their councils to underwriting the necessary costs. So you see, my doubts do not spring from thin air.

As to the term "medical model," which is under fire in many places, and in some places has become a pejorative term, Ludwig⁸ points out that it "need not be limited solely to scientific principles or established 'facts.' Medicine as practiced both past and present represents a blend of empirical observations, scientific knowledge, unproved assumptions, and folklore. What distinguishes it," he points out, "is a philosophic orientation toward dealing with symptoms and signs that represent disease and that elimination of these causes will result in cure or improvement in individual patients." To this we can add that it has always been known that medicine is both an art and a science and that much of the curative process rests in the intimate doctor-patient relationship.

Criticism of the medical model strikes directly at psychiatric diagnosis, and the problem is not helped by the differences of opinion which trouble the profession in this regard at the present time. While some colleagues see the advances in biologic research and the advances in psychopharmacology as positive indices drawing psychiatry closer to medical practice, others disagree and see the future of psychiatric diagnosis tied more firmly to the future of psychiatric social function. Peculiarly enough, they believe that to the extent

psychiatry preserves and expands its functions to assist the individual's personal, social and spiritual growth, psychiatric diagnosis will become useless and unnecessary. Its function, they believe, is to preserve and expand its social function. With this latter I heartily disagree. Unfortunately, we in psychiatry for a number of years have been listening to various pied pipers who write about "Myths of Mental Illness," "The Madness Establishment," "Prisoners of Psychiatry," etc., to the point that we have had to severely interrogate ourselves, for we are being described as jailers, and the question in official circles is "What is a psychiatrist and should psychiatry continue to exist?"

Some of our colleagues temporarily lost sight of their mission. They failed to recall that we have several givens which rather directly point out psychiatry's direction in the future as they have in the past. The first and most important is that there are millions of people who suffer from the annoyances and torments of emotional and mental disorders. A number of these illnesses have physical accompaniments, and some are even the result of somatic disorders. The second given is that psychiatrists are physicians trained to detect and treat the illnesses of the whole individual, psyche and soma.

An individual's reactions are a result of his background, his physical and mental state, and his environment. The trouble starts when critics sharply limit the physician-psychiatrist's duties to the treatment of disease and then claim that emotional states are not diseases, ergo the physician is out of place in trying to treat them. If emotional states are not diseases, in the strict organic sense, they are illnesses and they lead to symptoms which may indeed respond to the psychiatrists' ministrations.

In the minds of many individuals, even of professionals, these two terms, *disease* and *illness*, are regarded as synonymous and they are not. The observations of an astute internist, Jeremiah Barondess,⁹ are enlightening in this regard:

Another problem that is slowly becoming clearer for us as clinicians revolves about the distinction that must be drawn between the concepts of *disease* and of *illness*. We have tended to regard the two terms as more or less synonymous, but they are not. As definitions, I would suggest the following. A *disease* is a biologic event of a pathologic sort; it is something that happens to a cell, or to a molecule, or to an organ, an organ system, or even to an entire organism. Ultimately, how-

ever, it is a biologic process and is to be understood in scientific (that is to say, objective, quantitative, reproducible) terms.

An *illness*, on the other hand, is a human event; it is a grouping of discomforts, dysfunctions and resultant personal and social dislocations occurring in a person, and reflecting the interaction of that person with a disease.

And he further states:

It [an illness] must be understood as an event in the course of an individual's life, an event which is often of great importance of course, but nevertheless one event, among the myriad making up anyone's life, and embedded in a matrix of concerns, responsibilities, hopes, and fears, all of enormous importance to the patient. An illness, in other words, is ultimately to be understood not in scientific but in human terms.

These descriptions do not decry science nor do they find anything antihuman in it.

The difficulty for clinicians lies with our ability to understand and treat disease in terms of basic mechanisms; we confuse management of the disease with management of the illness; and in "our scientific approach to the disease, we fail to address the illness as adequately." Dr. Barondess thinks this distinction is part of the basis for the difficulties doctors and patients are having with each other these days and that it has caused some of the alienation that has eventuated.

At the risk of dwelling too heavily upon the good doctor's ideas, I retail to you one other of his insightful comments:

The overall point, of course, is that in our advancing scientific expertise in relation to disease we need to guard against dehumanization of our management of illness. We must recognize that there are two sets of needs to be met and both are important; that empathy is more than courtesy at the bedside and that we have to understand and feel the patient's experience.

There are various charges cited to us in regard to sociologic problems causing mental illnesses. Norman Brill,¹⁰ in answer to them, noted that those who have worked intensely with psychiatric patients have had an opportunity to see how much interpersonal friction, unhappiness, and conflict exists in families neither poor nor militated against. Their divorces, alcoholism, depressions, psychosomatic disorders, psychoses or neuroses certainly are not caused by poverty. It is true that the incidence of these disorders is high in those of low economic status, but poverty is neither necessary nor sufficient to produce mental illness. It is as unscientific to say that poverty causes mental illness as it is to say that wealth

prevents it. Leon Eisenberg,¹¹ apropos of the same situation, noted that:

In other parts of the world we can only state that psychoses identifiable by indigenous as well as by Western practitioners do occur in appreciable numbers; . . . the data we do have make it absurd to accept the simple minded proposition that mental illnesses are myths that can be abolished by legislating them out of existence.

The late Sir Aubrey Lewis¹² was of the same opinion. He stated:

There is no convincing statement that the etiology and pathology (including psychopathology) of the varieties of mental disorders is different in Africans from what it is in Europeans or that the incidence is grossly different or that very diverse traditions, religious and social institutions have had more than a pathoplastic influence on the manifestations of mental illness. It may be that there are stronger and deeper differences than I am implying, but it has not been demonstrated . . . it seems unlikely that these basic differences ever will be demonstrated.

It does seem to me that we in psychiatry have been unduly apologetic and that sometimes some of us have listened to critics who are so advanced that they don't make sense. Sir Martin Roth,¹³ in discussing this situation, noted:

Among other things, it is asserted that psychiatrists have through their concept of illness encouraged a cult of irresponsibility and provided criminals, delinquents, etc., with an alibi for misconduct. Thomas Szasz avers that a man who describes himself as Christ or Napoleon is a liar rather than a patient. Any misdemeanor he commits should be dealt with legally. One could dismiss this as silly except that it represents a wide body of opinion which is tilting at the whole concept of illness.

Another complaint about us often heard is that psychiatry fosters an elitism among its practitioners. Dr. Louis B. Wright's¹⁴ comments about the same accusation against educators and education give an answer which is also appropriate in our situation:

One of our current problems is fear among the alleged intelligentsia of establishing an elite. Everybody must be common and some more common than others. Actually this phobia has created its own elitism, an arrogant elite of the left.

Our Future and the Future of Our Patients

Thus we see the position of contemporary psychiatry admittedly confused and rather frequently assailed. The question has even been asked, "Does psychiatry have a future?"—and the vultures seem to be hovering, awaiting its final

demise. It was looked upon by some as a policeman for the social order—a covert penal system designed to maintain law and order. Some, as Eisenberg¹¹ says, "contend that mental ailments are problems of living and that people from his neighborhood are better able to treat the patient than doctors distant from him in status, education and social class." Also, psychologists tell us that physicians study medicine that they do not practice, and practice psychology that they do not study. To further complicate matters, we find that today a large multitude of people of every description practice psychotherapy of a sort. In addition to psychiatrists and psychologists, social workers, nurses, clergymen, indigenous workers, ex-addicts, ex-alcoholics, and housewives practice their own form of treatment. We are, therefore, in danger of having the population practicing on each other like the people in that mythical community which lived by taking in one another's washing.

Added to all of this is the fact that there are more than 200 groups of various kinds, all operating under the guise of "group therapy." There are marathon groups, weekend groups, the touchies, the nudies, the feelies, all calculated to release inhibitions and to ease social relationships. One patient told me that some if not many of them are orgies; anyone can start a group and many of them are led by people with no training at all.

I would like, at this point, to insist upon the importance of the psychiatrist never de-emphasizing the necessity of learning and adhering to those principles which are basic to the useful one-to-one relationship and therapeutic interaction—namely, psychotherapy. No matter what anyone else does or what path the psychiatrist might take, it is essential that he never lose this skill, not only because of its essentiality for patients and of his own use of it, but also because he is chiefly responsible for conveying this important component of the practice of medicine to his medical colleagues.

Rogers¹⁵ reminds us that both disease and illness are the proper purview of medicine. "Physicians can cure but few diseases—they can modify several more. But the fully informed physician should be prepared and willing to treat most if not all illnesses and somewhere along the line in our scientific transformation this obvious absolutely basic and fundamental mission of the physician seems to have been mislaid." He asks, "How did we go astray?" The error, he states,

"probably lies in our efforts to be scientific and technologically proper. This leads us to fail to address the problems of illness with equal intensity. From the patient's point of view, illness as he or she perceives it is vastly more important than disease as we diagnose it in medicine, which is not a science though it derives much from it." He believes that this perception of illness requires more attention to the sensitive and caring support of the humans we treat. He believes we should keep this in, even as our science base and our ability to alter the course of disease is extended.

It is obvious then as we read the literature that psychiatry is rapidly becoming closer to general medicine. The return of the requirements of some exposure to general medicine in the residency training programs, the rapid advances in psychophysiology and psychopharmacology, along with the increasing use of psychiatrists in general hospitals in what has become known as "liaison psychiatry," all point in that direction. Also the more enlightened use of monoamine oxidase inhibitors and the use of lithium for mood swing disorders lead us in the direction of medicine. Mental illness is now looked upon not as an inevitable tragedy but rather as an event in the lives of people which requires early and skilled treatment.

We in psychiatry were badly off for a while—divided and unable to agree on either diagnostic terms or patient treatment. The new approaches of so-called consultative liaison psychiatry offer us a unique opportunity to use both the medical and psychiatric training which we have laboriously acquired, and we will of necessity acquire a new status in the medical discipline which for years we neglected. It will be incumbent on the psychiatrist to renew his knowledge of medicine, for presently we are working with medications which were not on the scene at the time some of us were in medical schools. Also psychiatric disorders are changing regularly due to economic, environmental, and social changes heretofore only peripheral to medical and psychiatric interest.

When the question was asked, often in irony, "Should psychiatry exist?" it was not easily answered—for with psychotherapy being the property of many, and practitioners from other fields being the largest users of psychoactive drugs, and lawyers and civil libertarians determining who could be hospitalized, and third party payers telling us what they would and would not pay for,

you will admit we have been in a bit of a fix. All of this led to a growing feeling of nihilism among the younger psychiatrists in this country, but strangely enough, in the United Kingdom the majority of patients who visited community psychiatric installations appeared to be well within the mainstreams of psychiatry's purview, i.e., psychoses, neuroses, intoxications, character disorders, organic brain disease, etc. It may well be, as Ransom Arthur¹⁶ states, that in the future a great deal of what is now called community mental health care in the United States will continue to be delivered by professionals who are not psychiatrists. Psychiatrists will be primarily reserved for situations which clearly demand their expert medical skills.

I will not go into the Kafkaesque stories of what is happening to our patients who have been turfed out of mental hospitals; the condition of many of them is pathetic. In one year it is estimated that more than 12,000 of them gravitated to the Bowery. Bellevue alone gets 250 to 350 patients per day.

Also you know about the philosophies of the antipsychiatrists in our midst; their names are on every one of the legal briefs which are being filed as class action suits. Strangely, however far-fetched some of it is, it may redound in the end to psychiatrists' advantage. Psychiatry might rise as did the phoenix from the ashes.

Well, what can we do about all of this now? Let us listen again to Eisenberg,¹¹ for he makes such good sense:

Psychiatry at its best is a paradigm for the general medical practice of the future. This may seem an outlandish claim for a field which boasts so few spectacular advances. Yet I believe it to be true because psychiatric practice deals with human distress in a context that must include the psychosocial as well as the biological. There are no imperialistic aims behind this claim. Quite to the contrary, insofar as psychiatry is successful in clarifying the psychobiological bases of health and illness, that knowledge will pass into the domain of the generalist and the psychiatrist will join other specialists in the secondary and tertiary cadres of the health system.

It is generally agreed now, as it has been in the past, that personality and psychosocial factors are also of considerable importance in coping with stress diseases. Authors now supply lists of types of stress that may precede coronary disorders. Assembled from many observers, the list contains factors under the heading of financial, occupational, domestic, family, and social con-

tacts. Cancer, stroke, cardiac and kidney diseases all have their emotional accompaniments. Continuous care units also have come under psychiatric scrutiny and are at times suspect as one factor in postoperative delirium. Actually, for more than 20 years psychiatrists have been in daily consultations with specialists in other fields on the various medical floors of the Mayo Clinic, as they have been in numerous general hospitals throughout the country. It is in these general hospitals and in the small private mental hospitals that part of the future of psychiatric practice lies, at least until the time that the smoke clears away and the communities decide what they want and what will be best for them. Meanwhile, it is essential for us to remain close to our medical base. We sprang from it, we were nurtured by it, and unless we see ourselves as physicians we will not be good psychiatrists. How are we to accomplish this return of the prodigal son? Perhaps by the phenomenon of *complementarity*.¹⁷


I have spoken of this phenomenon a number of times, but at the risk of being repetitive in a good cause, I repeat it here. The famous Nils Bohr, when faced with the dilemma of trying to reconcile the conflicting views of fellow physicists, was able to encompass what on the surface appeared to be diametrically opposing views by noting that they complemented each other. The differences he was getting together were concerned with the phenomenon of light and whether it consisted of particles or waves. World famous physicists were at odds with each other—Planck, Huygens, Einstein, et al. Bohr's great contribution was that he could see overlap in their experiments and he could bring order out of chaos. He could perceive that all his colleagues were right and all were wrong, or that each was incomplete when his views were expressed unilaterally. Realizing they had not carried their thinking to the next logical step, Bohr introduced into the quantum theory one of its basic tenets—the theory of “complementarity.”

This was not a compromise; it was a gathering together of incomplete ideas, and Bohr realized that this fundamental idea could be applied to many phenomena in life over and above atomic physics. This is what we are trying to do, isn't it? To get warring factions in psychiatry together without compromising anything or anyone. I present it to you as a hopeful vista for psychiatry. Psychiatry is in trouble today because as we know some practitioners are hooked on biologic facts and approaches, and some are hooked on

sociological approaches, but the quintessence of medical practice is complementarity, and for psychiatry, to use the vernacular, “it gets it all together.” It is the science and the art of medicine. There has been a right and a wrong to the various theories put forth to the psychiatrist. The art is to “hold fast to that which is right and which is good.” *Complementarity* therefore, should be our watchword.

Let me close this Frank H. Luton Lecture by a quotation from another of his friends and admirers—namely, John Romano,¹⁸ who in his 1976 Salmon Lecture, stated:

The major function of the psychiatrist and one unique to him is that he serves as a crucial bridge between genetics, biology, and clinical medicine on one hand and the behavioral sciences on the other. The psychologist, the social worker, and the social scientist lack knowledge of the body, the biologist of the mind, and up to the present the nurse has had insufficient scholarship in either field to serve the purpose of a bridge. Further I believe that if we are to serve this function properly we must become expert in both biologic and psychosocial systems. Only then will we be able to interrelate effectively the knowledge from these basic sources in our unique role and contribution as clinician and scientist. To neglect scholarship at either pole would be to diminish our usefulness for tomorrow.

With this comment I close, expressing my high regard and affection for the man we honor tonight and for all of the great groups of clinicians and teachers who now follow in his wake. 

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The Role of Radiation Therapy in the Treatment of Astrocytomas

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The role of radiation therapy in the treatment of astrocytomas has been fraught with controversy for many years. As recently as 1955, an author of a textbook on radiation therapy stated that it was of no practical value in the treatment of astrocytomas.¹ In spite of this, there has been a general feeling among radiation therapists and neurosurgeons that radiation is effective in the treatment of astrocytomas, and this has led to its widespread use for many years. The primary problem in determining its value has been a failure to study similar groups of patients who have been treated with radiation therapy and compare these with others who have not. Recently, a number of reports have become available which appear to better define the exact role of radiation therapy in the treatment of astrocytomas.

In the ideal situation, a person with an astrocytoma would have complete surgical removal of his tumor with no residual effects, but this situation is rarely achieved. Unfortunately, astrocytomas are prone to invade deeply into the mid-brain structures, cross into adjacent lobes of the brain, or infiltrate across the corpus callosum to the opposite hemisphere. Rarely is a tumor localized well enough to one of the polar regions of the brain such that it can be totally extirpated with a margin of healthy tissue. Therefore, in most situations, the neurosurgeon is able only to biopsy or incompletely excise the lesion, and if no additional therapy is given, the tumor will continue to grow or regrow and eventually result in the death of the patient.

Pathology

It appears that the pathological grade of the astrocytoma has considerable influence on the eventual outcome of the individual patient. There

have been several methods of grading astrocytomas but most authors seem to prefer the system of Kernohan and Sayre,² which grades astrocytomas of increasing malignancy from I to IV. In general, the grade I astrocytomas have sharply defined margins and enlarge slowly. This is in contrast to grade IV astrocytomas which have indefinite margins, infiltrate widely, and usually lead to the rapid demise of the patient.

Grades I and II

Because of the localized nature of grade I and II astrocytomas, the question of whether or not postoperative radiation therapy adds to the survival has generated considerable debate. A recent review by Fazekas³ shed some light on the role of radiation therapy in grade I and II lesions. From this study it appears that radiation therapy adds nothing to the five-year survival of patients whose tumor resection is grossly complete in contrast to the improvement noted in patients whose tumor was incompletely excised. The disease-free survival at five years was increased from 13% to 41% by the use of postoperative radiation therapy. These findings compare with those of Sheline,⁴ who reported on patients with incompletely excised grade I and II astrocytomas. The grade I lesions without postoperative radiation had a 25% five-year survival while those receiving it had a 58% five-year survival. Grade II astrocytomas incompletely excised without postoperative radiation had a 0% five-year survival while those with it achieved a 25% five-year survival.

Grade III and IV

Grade III and IV astrocytomas appear to be much more aggressive tumors, and many pathologists have tended to group these two classes together under the general term glioblastoma multiforme. Sheline⁵ has recently stressed the importance of separating these two groups because of

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the significant difference in prognosis resulting mainly from the use of postoperative radiation therapy.

As has been noted, the grade III and IV astrocytomas are frequently highly invasive and only rarely completely excised. Recent reports from Mayo Clinic, University of California at Los Angeles, University of California at San Francisco, and Jefferson University have compared the results of patients receiving only surgical resection with those receiving surgical resection and postoperative radiation therapy.⁶ With grade III lesions the Mayo Clinic reported only a 3% five-year survival in those patients having surgical resection only, while UCLA and UCSF reported no survivors at five years. This compares to those patients who received surgical resection plus radiation therapy where the Mayo Clinic reported a 16% five-year survival, UCLA a 10% five-year survival, Jefferson University a 22% five-year survival, and UCSF an 18% five-year survival.

The importance of distinguishing between grade III and IV astrocytomas is revealed in the fact that no patient with a grade IV astrocytoma survived five years with or without postoperative radiation therapy. Mayo Clinic reported 5% surviving at one year with surgery only while 29% were surviving at one year in those patients who received radiation. At the end of two years the Mayo Clinic had 0% surviving in the group receiving only surgery while 10% were still surviving in the radiation therapy group. From these studies it appears that postoperative radiation therapy in patients with grade IV lesions increases the survival for the initial few years, but at the end of five years all patients have died.

Radiation Techniques

Just as other facets in the treatment of astrocytomas have been controversial, the dose of radiation given these tumors as well as the treatment volume has been a subject of much debate. Considerable fear has been expressed that tumoricidal doses delivered to these patients would result in later brain necrosis. We now feel that we have established treatment policies which can result in the delivery of satisfactory courses of radiation with minimal risk of late sequelae. We have found that doses in the range of 5,000 to 6,000 rads given at a rate of 150 to 200 rads a day is well tolerated by patients. It has been recommended that these doses be adjusted for pediatric cases. We generally reduce our total dose

by approximately 10% for these patients.

For the grade I and II lesions, which are generally more localized, local radiation portals using restricted fields can adequately treat these patients. For grade III and IV lesions, where the margins of tumor are likely to be less exact, whole brain portals are used initially to cover the tumor and give adequate margins. Later a boost dose of radiation can be delivered through reduced portals. The use of steroids to control cerebral edema during radiation therapy is individualized according to the needs of each patient. Often the patient can be tapered off his steroids during his course of radiation therapy.

The quality of life is of utmost importance when considering therapy for these patients. She-line has reported that most patients maintain a useful and often nearly normal life following postoperative radiation therapy. Using the treatment regimens given, there has been no significant damage from the radiation. Other experimental studies have shown that the risk of radiation necrosis comes when the individual daily doses are high, i.e., 400 rads a day, or when the total dose is given over a short period of time.⁷

Future Developments

It appears that at the present time we have reached a point of maximum benefit using postoperative radiation therapy in the dose range of 6,000 rads in six or seven weeks. In the future we will be looking for new ways to improve our results, and at the present time this consists of several new developments: (1) The use of the chemotherapeutic agent BCNU has shown promise in several studies on patients with malignant gliomas.⁸ Several new agents are presently under investigation in hopes of finding one that will be effective in eradicating tumor remaining after incomplete surgical resection. (2) Another area under investigation is the use of certain chemical agents to sensitize radioresistant tumor cells to routine doses of radiation. Several agents have shown promise, and this field of study is under active investigation. (3) The advent of CT scanning has revolutionized neuroradiology. Using this technique we are better able to localize cerebral tumors and define the extent of involvement. This should result in more accurate radiation therapy treatment.

Summary

It would appear that radiation therapy has a very definite role in the treatment of astrocy-

tomas. In the grade I and II lesions which are incompletely excised, postoperative radiation therapy has significantly increased the five-year survival. In grade III lesions with radiation, five-year survival has increased from 0-3% up to approximately 20%. Patients with grade IV astrocytomas have a very poor outlook with no survivors at five years, but postoperative radiation therapy has been able to prolong the one-, two- and three-year survival rates.

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"The Pill" & the Cervix . . .

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Discussion

Kastner and Holzer³ studied 2,337 routine Pap smears from users of oral contraceptive steroids compared to 2,000 nonusers. One percent of each series had either positive or suspicious evidence of cancer of the cervix uteri. A summary was made of three clinical surveys recorded in 1974.⁴⁻⁶ There were 15,245 users and 25,439 nonusers of oral contraceptive steroids and 12,300 gravid women. There was no appreciable differential risk for cancer of the cervix uteri of any of these groups when age of the woman was considered.

On the contrary Sandmire et al¹ summarized the literature on the use of oral contraceptive drugs and carcinoma of the cervix. They found disagreement on the subject. But from their large clinical experience they were unable to document these drugs produced any effect on the incidence of the disease. Age of the patient and gravidity were more important factors. This was our experience.

We believe the smaller incidence of severe degrees of neoplasia of the cervix uteri in the treated women as opposed to the nontreated was attributed to the opportunity to examine these

women regularly. As previously mentioned those in the treated group were required to have a physical examination and cervical cytologic spread every year before their prescriptions could be renewed for oral contraceptive steroids.

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Analgesic Nephropathy: An Increasing Problem

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In recent years we have become concerned, not only because of the increasing number of patients who present with analgesic nephropathy, but also because of the predominance (in our series) of patients who have used prescription drugs rather than proprietary medications. In many instances, the diagnosis has been made only after advanced and permanent damage has occurred, leading in several cases to end-stage renal failure requiring chronic dialysis.

We are reporting here brief synopses of 12 cases to emphasize the importance and frequency of this entity, in the hope of stimulating earlier diagnosis by the primary physician, with consequent prevention of advanced renal disease. Early diagnosis of this lesion offers an opportunity to practice preventive medicine more effectively than is the case with most diseases of the kidney, for which effective measures are often lacking.

The cases reported here have been selected to represent a broad spectrum of the patients we have seen, and all have presented within the past five years.

Report of Cases

Case 1. A 41-year-old Caucasian woman was referred after evaluation for anemia revealed azotemia. Studies included a hematocrit of 29%, creatinine of 10 mg/dl, BUN 100 mg/dl, CO₂ 15 mEq/L, and potassium 3.2 mEq/L. Use of analgesics was denied; there was a history of emotional problems. Treatment with supplemental alkali and potassium was instituted with significant improvement, and the creatinine fell to 5.5 mg/dl. Eighteen months later, she was hospitalized in coma; brief apnea required intubation and ventilator assistance. At that time, family members admitted she was obtaining propoxyphene-APC from several different pharmacies under prescriptions from several different physicians, and that APCs had been used in the past. Four months later, she was again hospitalized for semi-stupor, and a salicylate level of 8.6 mg/dl was obtained. Approximately 40 months after initial presentation she had reached end stage, and chronic dialysis was instituted. She expired a few months later.

Case 2. A 26-year-old Caucasian woman was transferred from another hospital where she had been admitted because of abdominal pain. She had been receiving parenteral narcotics prior to transfer. History revealed multiple revisions of a minor operative procedure; she had had gastric resection six months previously for bleeding ulcers. The patient freely admitted to long-term

daily use of propoxyphene-APC, and a relative surreptitiously called to say that the patient had gotten the medication in "1,000-capsule bottles." There was also a history of "spells," thought by the family to represent some sort of seizure state. Hematocrit was 23%, creatinine 3.3 mg/dl. One month later, the patient was admitted in a comatose state after taking an unknown amount of analgesic medication. CO₂ was 8 mEq/L, and she was placed on bicarbonate supplementation. Her early course was complicated by considerable non-compliance. However, it is believed that she has finally given up her use of analgesic compounds, and she remains off dialysis some 30 months later, with a serum creatinine in the range of 5 mg/dl.

Case 3. A 56-year-old Caucasian woman was referred because of severe renal failure complicating giant gastric ulcer. There was a history of a "seizure disorder," for which she was receiving phenytoin. She admitted to taking "large amounts" of propoxyphene-APC for "a long time." She also required medication for psychiatric difficulties. Creatinine was 10.6 mg/dl. She required vagotomy and pyloroplasty for her ulcer disease, and chronic dialysis was instituted. She died five months later.

Case 4. A 34-year-old Caucasian woman was seen in consultation because of unexplained azotemia. One month previously, she had had premature delivery of a stillborn infant from a pregnancy complicated by hypertension and "toxemia." BUN at that time had been 97 mg/dl. There was also a history of recurrent urinary tract infection since age 19. The patient was receiving parenteral narcotics for back pain at the time of consultation. She denied recent use of other analgesics prior to this hospitalization, but admitted to use of propoxyphene-APC for headaches in the remote past, saying that she had discontinued the medication "because it didn't work." A review of previous hospital records revealed multiple past admissions for headaches and abdominal complaints, with diagnosis of duodenal ulcer by x-ray on one previous admission, and mention on several admissions that the patient was receiving propoxyphene-APC. Urinalysis and BUN had been normal two years previously. Laboratory findings on admission included a hematocrit of 23%, retic count 5.5%, creatinine 4.5 mg/dl. She was readmitted one month later severely acidotic and in coma; salicylate level at that time was 22 mg/dl, creatinine 6.9 mg/dl. Psychiatric evaluation revealed significant emotional problems. The patient seemed to accept the relationship between her renal disease and the use of analgesics, and it is believed she discontinued or greatly decreased her intake of these medications. Thirty-six months later her hematocrit was 21%, and creatinine 3.5 mg/dl.

Case 5. A 52-year-old Caucasian woman was seen in consultation because of recurrent urolithiasis and urinary infections, with intermittent azotemia with exacerbations. There was a past history of "migraine headaches" for many years, "ulcer," a "strained back," and previous use of pentazocine injections at home. She admitted to use of large amounts of APC with codeine for some time. The patient required multiple readmis-

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sions over the next 21 months for renal colic—at times with demonstrated ureteral stones, some passed spontaneously, one requiring endoscopic removal; “falling out spells”; and bronchitis. She was hospitalized by different physicians in four different hospitals, and underwent neurologic, cardiologic, and pulmonary evaluations, always requesting pain medication at the time of admission. Mild degrees of azotemia generally coincided with episodes of ureteral obstruction. Hers was the only IVP showing “classical” changes of papillary necrosis, as well as multiple calyceal stones. Of further interest was the finding of fibrotic scarring of her anterior thighs because of her previous pentazocine use. We have not seen this patient in more than two years.

Case 6. A 36-year-old Caucasian male was seen in consultation during hospitalization for back pain and cervical disc disease. He had a history of headaches and admitted using “non-phenacetin containing analgesics.” Studies included creatinine 3.4 mg/dl, falling to 2.3 mg/dl; hematocrit 34%. Seventeen months later, he was hospitalized for an overdose of unknown medications, thought by some of his physicians to include propoxyphene-APC. He required intubation and ventilatory assistance. Creatinine was 13 mg/dl, hematocrit 24%. Creatinine rose to a maximum of 14.8 mg/dl, and BUN 190 mg/dl. He refused dialysis, and improved slowly. Discharge values included creatinine 9.6 mg/dl and BUN 126 mg/dl. The patient finally did admit to using propoxyphene and diazepam for nervousness. Further improvement occurred after discharge, and serum creatinine was 2.7 mg/dl 14 months later, at which time the patient was working full time.

Case 7. A 49-year-old Caucasian man was seen because of suspected renal disease secondary to collagen disease. He had a 20-year history of “rheumatoid arthritis,” without serological or objective findings at the time of evaluation. He had used steroids to excess in the past, and these had been withdrawn by his physician. He had bled from his upper intestinal tract at the time of anticoagulation for myocardial infarction, and was found to have “gastritis and duodenitis” on endoscopic evaluation and biopsy. He admitted to using “at least four per day” of propoxyphene-APC for years. His creatinine was 4.5 mg/dl; one year earlier it had been 1.9 mg/dl. The patient seemed to accept his diagnosis and was believed to be abstaining from analgesics other than oral codeine. Immediately subsequent to his initial diagnosis, however, he had been placed on oxycodone hydrochloride-APC, and then an aspirin compound. These were discontinued upon our recommendations. Two years later, creatinine was 3.3 mg/dl. He died a short time later from a second myocardial infarction.

Case 8. A 57-year-old Caucasian man had had his initial diagnosis made by another physician three years before we saw him. At that time, his consulting internist calculated he had taken greater than 5 kg of phenacetin through use of APC powders for headaches. Creatinine at that time was 4.5 and 5.0 mg/dl; three years later it was 4.9 mg/dl.

Case 9. A 67-year-old Caucasian woman was seen following discovery of renal insufficiency at the time of evaluation for anemia. There was a long history of headaches and emotional problems. The patient admitted to use of large amounts of propoxyphene-APC and APC with codeine for years. Creatinine was 3.9 mg/dl.

Case 10. An 80-year-old Caucasian woman was seen

because of progressive renal insufficiency over the preceding two years, with creatinine rising from 2.5 to 5.5 mg/dl over that time. There was a history of headaches for many years, with heavy use of multiple analgesics. There was a questionable history of previous seizures. She also manifested fibrotic scarring of the anterior thighs similar to that found in case 5 from pentazocine use; the patient stated that this had been caused by “biotics given by a doctor in Florida.” She died a few months later.

Case 11. A 41-year-old Caucasian male paramedical employee with a seven-year history of “arthritis and gout” presented with renal insufficiency. No objective evidence for arthritis was found. Multiple medications were being used, but of these, the only one with known significant renal toxicity was propoxyphene-APC, taken in a dose of “at least six per day for seven years.” Creatinine was 3.7 mg/dl.

Case 12. A 67-year-old Caucasian woman with a history of taking large quantities of APC powders for many years because of headaches was seen because of renal failure. Hematocrit was 23%, retic count 5.5%, creatinine 7.7 mg/dl, CO₂ 8 mEq/L, K potassium 3.3 mEq/L. The patient was begun on supplemental alkali and potassium, and was symptomatically improved. Ten months later she had a myocardial infarction; creatinine was 10 mg/dl.

Comments

With the exception of cases 2, 4, and 5, all patients had urinalyses showing 0 to 2 plus qualitative proteinuria, with minimal or no pyuria. Case 5 had almost constant bacilluria with recurrent symptoms of infection and passage of stones, and cases 1, 2, and 4 had relatively persistent bacilluria; these patients also had persistent pyuria of significant degree.

Except for cases 5 and 8, all patients had IVPs that were either considered normal, except for decreased concentration of contrast material, or showed findings consistent with “pyelonephritis,” with blunting of calyces and/or irregularly contracted kidneys. Only case 5 had an IVP showing classical changes of papillary necrosis with associated calyceal calcifications and stones. Case 8 also had a few small calyceal calcifications and a history of one previous spontaneously passed stone. Cystography showed no reflux in those patients in whom it was performed.

Anemia was present in all patients to some degree, and in some patients was considered disproportionately severe when compared to the degree of renal insufficiency. In some of the patients, the degree of reticulocytosis was considered higher than expected in the anemia of renal insufficiency. Several patients had undergone elaborate and extensive evaluation of their anemia prior to diagnosis.

Cases 1, 2, 3, and 12 developed hyperchloremic acidosis severe enough to require supplemental bicarbonate; in cases 1 and 12, potassium supplements were also required. In the latter cases, we have generally used a mixture of potassium acetate, bicarbonate, and citrate.

Cases 2, 3, 5, and 10 had a history of “spells” with the possibility of seizures always considered. Although some of these patients were placed on anticonvulsants by other physicians, it was of interest to us that only one of these “spells” was ever witnessed by medical personnel, and was felt unequivocally not to represent true seizure activity, but rather more likely to be hysterical in origin.

Hypertension, usually of moderate degree and sometimes of extreme lability, was present in the majority

of our patients, and was usually easily controlled by a standard regimen. Duodenal or gastric ulcers were present in cases 2, 3, 4, and 5, and led to surgery in cases 2 and 3. Significant emotional disturbances were felt present in all patients with the possible exception of case 8.

Discussion

Since the initial report by Spühler and Zollinger¹ analgesic nephropathy has been reported with increasing frequency. Although the majority of reports have been from Europe and Australia, where up to 20% of end-stage renal disease has been reported to arise from this condition,² recent reports³⁻⁶ suggest an increasing incidence of this diagnosis in North America. Certainly, we are now seeing, or recognizing, more of these patients than in previous years, and we have been particularly struck by the role prescription drugs seem to play in the etiology of many of our cases.

A great deal of research has been done on the etiology and pathogenesis of this disease, and review of this work is beyond the scope of our report. However, it is pertinent to note that, while similar lesions have been produced in various animals under laboratory conditions using phenacetin alone,⁷ and even aspirin alone,⁸ the combination of both these drugs has been consistently shown to be more toxic.⁹ From a clinical standpoint, our experience has paralleled that of others¹⁰: it is virtually always the combination of these drugs that has been incriminated. We have, however, followed the lead of Kincaid-Smith¹¹ in assuming that both aspirin and phenacetin alone, as well as acetaminophen, are potentially dangerous once the lesion has evolved.

Although studies^{12,13} have suggested that papillary necrosis is the primary lesion, with subsequent development of a more diffuse interstitial nephritis as an apparent result of this initial lesion, it has seemed to us that emphasis on papillary necrosis as a clinical feature has led to a significant degree of underdiagnosis of this disease, since papillary necrosis can only be diagnosed clinically if the patient passes tissue that is recognizable as papillae, or if radiographic evidence is found. Either requires that a necrotic papilla has detached itself, or at least has begun to separate, and may represent a relatively late phase in some cases. Certainly these findings were present in only a minority of our cases.

We have felt it more important to stress the possibility of this diagnosis, not only in those patients who are found to have papillary necrosis, but also in those who present with any degree

of azotemia in the absence of obstruction or reflux and with minimal or absent proteinuria. We strongly suspect that many patients now diagnosed as having pyelonephritis have an underlying analgesic nephropathy as the basis for their renal disease.¹⁴

The clinical manifestations of the disease have been well described by others,^{2, 3, 5, 6, 13, 15} and our patients have fit well the generally accepted pattern. They are predominantly female, usually with headaches. Emotional disturbances are almost invariable. Peptic ulcer disease (possibly secondary to the medications) is frequent. Questionable seizure states, perhaps representing true seizures secondary to toxic effects of medications or hysterical seizures secondary to the underlying emotional problems, are common. Anemia is sometimes more severe than that anticipated from the level of renal impairment, and may be worsened by the presence of iron deficiency from gastrointestinal loss or by the increased hemolysis caused by the drugs ingested. Methemoglobinemia and sulfhemoglobinemia may be present.

Hyperchloremic acidosis is common, may be unexpectedly severe, and may be associated with potassium depletion requiring supplementation, especially if the acidosis is corrected. Ureteral obstruction secondary to sequestered papillae or stones has been less frequent in our series than in some,¹² but must always be considered as a possibility when a sudden or unexpected decrease in renal function occurs. Salt wasting,¹⁶ with consequent further fall in clearance, has not been a serious problem in our patients. We have attempted to prevent this by recommending non-diuretic type drugs for the control of hypertension when possible, and by avoiding salt restriction except for the control of edema. Salt depletion may occur very slowly and subtly in these patients, however, and restoration may result in a significant improvement in renal function. This is especially important if surgery is contemplated, and occasionally requires dietary salt supplementation for long-term maintenance. Others have stressed the significance of dehydration as an etiologic factor, and the importance of maintaining adequate fluid intake in treatment.

Symptomatic infection has been a serious problem only in our patients with recurrent stone disease and/or passage of papillae, but asymptomatic bacilluria has been difficult to treat in several others, and both conditions require careful drug selection to prevent complications from the anti-

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bacterial agents themselves. It is difficult to maintain a sterile urine in such patients.

An increased incidence of ischemic heart disease with myocardial infarction, premature aging, premature nonuremic death, toxemia of pregnancy, and the postmaturity syndrome has been reported by others.² All but the last have been noted in our patients, but the series is too small for statistical interpretation. Although renal papillary carcinoma is also said to be increased, we have not observed it.

By far the most important, and often the most difficult, therapeutic measure is that of getting the patient to discontinue the use of all analgesic medications. We have followed Dr. Kincaid-Smith's admonition¹¹ to avoid not only aspirin-phenacetin combinations, but also either drug alone or its derivatives, such as acetaminophen, in patients in whom this diagnosis is suspected.

In contrast to our experience, the majority of patients in most reported series have apparently used proprietary medications rather than prescription drugs. We suspect that the presence of an aspirin-phenacetin combination in many analgesics is often overlooked by the prescribing physician, since our patients would sometimes discontinue their original drug, such as propoxyphene-APC upon our advice, only to return taking another offender, such as oxycodone-APC. However, a far more important source of excessive amounts of prescription drugs has been the use of prescriptions from multiple physicians by the same patient, usually obtained from different pharmacies. Our experience has confirmed that of others^{2, 3, 5, 12, 15}; discontinuation of medication may lead to improvement in renal function that may be sustained for months, or even years.

We are not sure why so many of our patients appear to have developed this disease predominantly from one medication. Although most patients had taken more than one formulation, by far the most used, both in quantity and frequency, was propoxyphene-APC. We are aware of no studies showing nephrotoxicity of propoxyphene, although this remains a possibility, and we suspect this finding is more related to the popularity of this drug in our area, compared to other combination products, than to any inherent property of the preparation. Another possibility is that propoxyphene may add some increased habituating properties to the basic APC combination.

In any case, it should be realized that large

amounts of the drugs must be taken, usually over a long period of time, before significant damage occurs, and that the emotionally stable, nondependent patient will only rarely take such quantities. However, in the case of the patient who repeatedly asks for refills of her analgesic medication, the possibility that she may be taking analgesics on prescription from more than one physician, or using proprietary drugs in addition, must always be considered. Also, commonly prescribed doses of many preparations, such as six capsules daily of propoxyphene-APC, if taken for several years, may contain enough aspirin-phenacetin combination to produce the disease.¹⁵

Finally, we would make a plea for considering the possibility of this diagnosis in the patient with renal insufficiency in the absence of obstruction, reflux, significant proteinuria, or other known cause of renal disease. In few forms of progressive renal failure is simple therapy so effective in slowing deterioration.

NONPROPRIETARY NAMES and TRADEMARKS OF DRUGS

Propoxyphene-APC—*Darvon Compound 65*
APC—*Empirin Compound*
APC Powders—*Goody's Powders*
Phenytoin—*Dilantin*
Pentazocine—*Talwin*
Diazepam—*Valium*
Oxycodone Hydrochloride-APC—*Percodan*
Acetaminophen—*Tylenol*
Potassium Acetate, Bicarbonate and Citrate—*Potassium Triplex*

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Accidental Aphrodisiac Ingestion

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The availability, efficacy and variety of aphrodisiac products are generally unknown. Similarly, the ingredients of commercial aphrodisiacs are often obfuscated. Despite the personal use of aphrodisiacs by adults, the potential problem of accidental ingestion of these products by children exists.

Report of Cases

Two male children, 2 years, 9 months old and 4 years, 5 months old, presented to the Naval Regional Medical Center emergency room in no apparent distress after the older child admitted that they had ingested some capsules. Their mother could not precisely describe the capsules which were stored in an Excedrin bottle, but knew that they had been sold as aphrodisiacs and purchased in another state. In hopes of determining the potential hazards of these products, the local poison control center was consulted, but a search for the general formulation or possible ingredients of purported aphrodisiacs in capsular dosage form was unsuccessful.

Since the children had taken an unknown quantity of an unknown substance, gastric evacuation was performed, and in addition they were given activated charcoal and a saline cathartic. Their physical and neurological examination remained normal during four hours of observation. Toxicologic analysis of emesis and urine did not detect any drugs. The children were sent home and remained asymptomatic.

Comment

The inherent problem encountered in the management of these cases was identification of the general formulation of these drugs. Since purported aphrodisiacs could not be readily identified in major toxicological references,¹⁻⁴ several local adult bookstores were surveyed; the products discovered are listed in Table 1. This list is not

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*The opinions or assertions contained herein are those of the writer and are not to be construed as official or reflecting the views of the Department of the Navy.

Reprint requests to UTCHS College of Pharmacy, 874 Union Ave., Memphis, TN 38163 (Dr. Czajka).

TABLE 1
APHRODISIACS IN ORAL DOSAGE FORMS

Product (Dosage Form)	Ingredients (Common Name)
Jungle Love (tablet)	Rufous capsicum annum (red pepper)
The Original Vice-Spice (capsule)	Albus simila 10% (similar to white?) Capsicum annum 90% (pepper)
Pseudo Energizers (capsule)	Rufous capsicum annum (red pepper)
Pseudo Hard-On-Drops (liquid)	Benzoate of soda Dulcis radix (licorice root) Asian ginseng Iberian piper concentrate (pepper?) Niacin
Pseudo Hard-On-Pills (capsule)	Albus simila 25% (similar to white?) Curcuma longa 50% (tumeric) Purus saccharum 15% (sugar cane) Zingiber officinale 10% (ginger)
Pseudo Love Stimulant (capsule)	Allium sativum 25% (garlic) Capsicum annum 50% (pepper) Purus saccharum 25% (sugar cane)
Pseudo Spanish Fly (liquid)	Ascorbic acid Dulcis (sweet?) Iberian piper concentrate (pepper?) Sucrose potio (sugar cane)

comprehensive and only indicates the variety and type of substances which are available. Botanical references⁵⁻⁷ were consulted for the identification of unfamiliar ingredients, but over half of the products contained at least one ingredient for which a familiar name could not be identified.

Even though most of the products in Table 1 are apparently vegetable formulations, substances with potentially greater toxicity may constitute other products. Purported aphrodisiacs should not be considered universally nontoxic in light of the morbidity which has been associated with some

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Disseminated Histoplasmosis in Advanced Hodgkin's Disease

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Hodgkin's disease is characterized by defective T cell function as reflected by cutaneous anergy and impaired in vitro lymphocyte transformation. This abnormal or defective cellular immunity plays an important role in the increased frequency of a variety of viral, fungal, and protozoal infections in this disorder.¹

Common fungal infections include candidiasis, aspergillosis,^{2,3} cryptococcosis,⁴ histoplasmosis,^{5,6} and mucormycosis.⁷ Cases of disseminated histoplasmosis in neoplastic diseases and immunosuppressed patients have been reported; the outcome has been often dismal despite active treatment.^{8,9} A case of stage IV Hodgkin's disease with disseminated histoplasmosis in which the systemic fungal infection was successfully treated with amphotericin B is reported.

Case Report

A 25-year-old nurse presented in February 1965 with swelling of the lymph nodes of left supraclavicular region. A biopsy done elsewhere revealed Hodgkin's disease, nodular sclerosing type. She had just discovered that she was pregnant for the first time. In March 1965, she received 3,000 rads to the left side of the neck. In September, she gave birth to a baby girl who was apparently normal except that the left side of the tongue seemed to be hypoplastic.

In the summer of 1966 she developed itching accompanied by pruritic pustular skin lesions that have persisted intermittently to the present time.

From 1967 to early 1972 the patient had several relapses, for which she was treated with single drug chemotherapy including nitrogen mustard and vinblastine, as well as with cobalt⁶⁰ irradiation. Several remissions were obtained which lasted for a few months. During this period she also had several episodes of lung infection requiring antibiotic treatment.

In April 1972 she was referred to the University of Tennessee Memorial Research Center and Hospital. After evaluation she was classified as stage IV-B because of liver and lung involvement and was started on polychemotherapy with six cycles of BCNU, cyclophosphamide, vinblastine, procarbazine and prednisone given

every four weeks according to the Southeastern Cancer Study Group (SEG) Protocol 340 for the treatment of advanced Hodgkin's disease. She did well, with regression of almost all nodes and improvement of pruritus.

On Nov. 4, 1972, her serum alkaline phosphatase level was markedly elevated, and liver biopsy showed spotty areas of liver cell necrosis suggesting possible toxic hepatitis. No evidence of Hodgkin's disease was demonstrable at that time, and therefore chemotherapy was discontinued.

In April 1973 she was readmitted for reevaluation of a persistently elevated alkaline phosphatase. Liver, spleen and bone scans and liver biopsy were normal. Serum leucine aminopeptidase was 84.6 units, and the results of SMA-12 analysis were normal except for an alkaline phosphatase in excess of 350 mμ/ml, and SGOT of 175 mμ/ml. The etiology of alkaline phosphatase elevation was undetermined. She denied intake of contraceptive pills.

In January 1975 the patient began having intermittent fever with episodic cough productive of clear, non-purulent sputum. The cold agglutinin titer was 1:16, and antinuclear antibody titer was negative. Sputum examination and cultures were negative for acid-fast bacilli, pathogenic fungi, bacteria and *Pneumocystis carinii*. Skin tests were negative for intermediate PPD, and the mumps reaction was only 2 mm. Complement fixation titer for histoplasmosis was <1:18. The results from SMA-12 analysis revealed alkaline phosphatase 275 mμ/ml, otherwise it was normal. Bronchoscopy and bronchial biopsy revealed chronic bronchitis but no evidence of Hodgkin's disease. Cytological examination and culture of the bronchial washings did not reveal any abnormality. The etiology of the bilateral pulmonary infiltrate was not determined but was thought most likely due to Hodgkin's involvement of the lung.

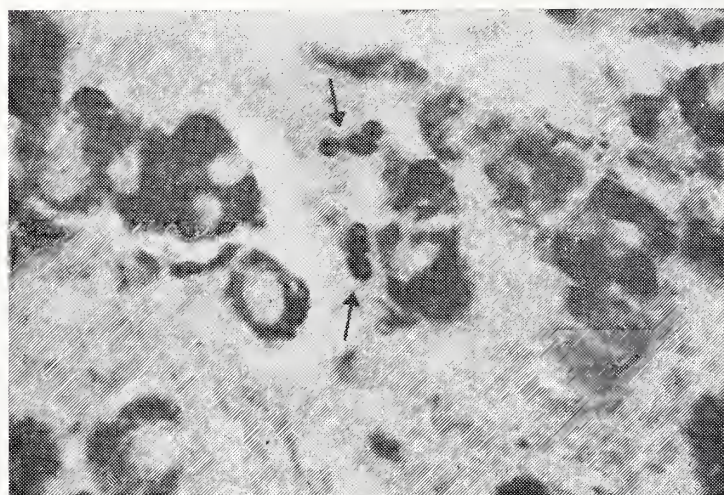


Figure 1. *Histoplasma capsulatum* in liver biopsy stained with silver methenamine. Magnification X 900.

From the University of Tennessee Memorial Research Center, Center for the Health Sciences, Knoxville.

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In October 1975 because of the persistent cough the patient underwent a left thoracotomy. Biopsies of the nodules of the lung revealed Hodgkin's disease, nodular type, mixed cellularity. Following recovery from surgery, the patient was started on chemotherapy with adriamycin, bleomycin, vinblastine, and dacarbazine (DTIC) based on a Southwest Oncology Group protocol. After six cycles of this drug regimen a chest x-ray showed that the discrete lung nodules had disappeared although numerous small irregular opacities in the lower two thirds of both lungs were still observed. Pulmonary function tests showed restrictive impairment and reduced vital capacity, and further chemotherapy was withheld because of fear of inducing pulmonary fibrosis by bleomycin, although she had only received a total of 208 units.

The patient did well until January 1977 when she developed striking pruritus, high fever, generalized malaise and loss of appetite. Repeat liver-spleen scan showed splenomegaly with defects of uptake indicative of a mass lesion in the spleen, and a gallium scan done in February 1977 showed abnormal uptake in the left upper quadrant suggesting splenic involvement, for which she underwent splenectomy in May 1977. The histologic specimen showed Hodgkin's involvement, and celiac nodes were noted to be enlarged at the time of surgery.

In June 1977 the patient developed a recurrence in the bilateral cervical area and was started on radiotherapy. After a few days it was noted from her chest roentgenogram that her pulmonary lesion had worsened, and therefore she was treated with hexamethylamine (based on SEG Protocol 267R for the treatment of resistant Hodgkin's disease). After four weeks, the chest x-ray showed improvement and cervical lymph nodes regressed. In the latter part of July she developed fever, progressive jaundice, dark urine and acholic stools. Laboratory data showed elevated bilirubin, alkaline phosphatase, LDH and SGOT. The PPD skin test was negative. Immunoglobulins were normal except for slightly decreased γ -globulin. Liver biopsy showed granulomatous hepatitis, methenamine silver stain of which showed *Histoplasma capsulatum* (Fig. 1). Fungal cultures from both liver and bone marrow biopsy revealed the same organism. Further questioning revealed exposure to bird nests while cleaning the attic of her house. She was then started on amphotericin B therapy.

Four days after treatment her fever subsided (Fig. 2) and jaundice slowly resolved. Liver function tests returned to normal except for the alkaline phosphatase which continued to be elevated. Amphotericin B was discontinued after reaching a total dose of 2 gm because of signs of early renal insufficiency. Repeat bone marrow cultures failed to show an *H. capsulatum*. At this time the patient is doing well, is completely anicteric, and is not receiving any medications for her lymphoma or previous fungal infection.

Discussion

Infections are frequently encountered during the course of neoplastic diseases. Changing patterns of bacterial diseases and the increasing frequency of fungal diseases have been reported, particularly in patients with acute leukemias and malignant lymphomas.¹

The immunodeficient state in patients with Hodgkin's disease, and the use of steroid therapy and chemotherapy have been reported as factors which predispose to increased incidence of fungal disease in this disease.^{10,11}

In long-term survivors with Hodgkin's disease, clinical deterioration with symptoms suggesting relapse may often be attributable to infection rather than reactivation of the lymphomatous process. In the absence of bacterial infection, fungal infection should be strongly suspected even with negative fungal serology. Biopsy material should be sent for fungal cultures and special stains as part of the differential diagnosis of granulomatous lesions.

Although treatment of disseminated histoplasmosis in immunosuppressed hosts has been disappointing,⁹ amphotericin B remains effective and is the drug of choice, as shown in this case report.

To our knowledge, this is the second report of

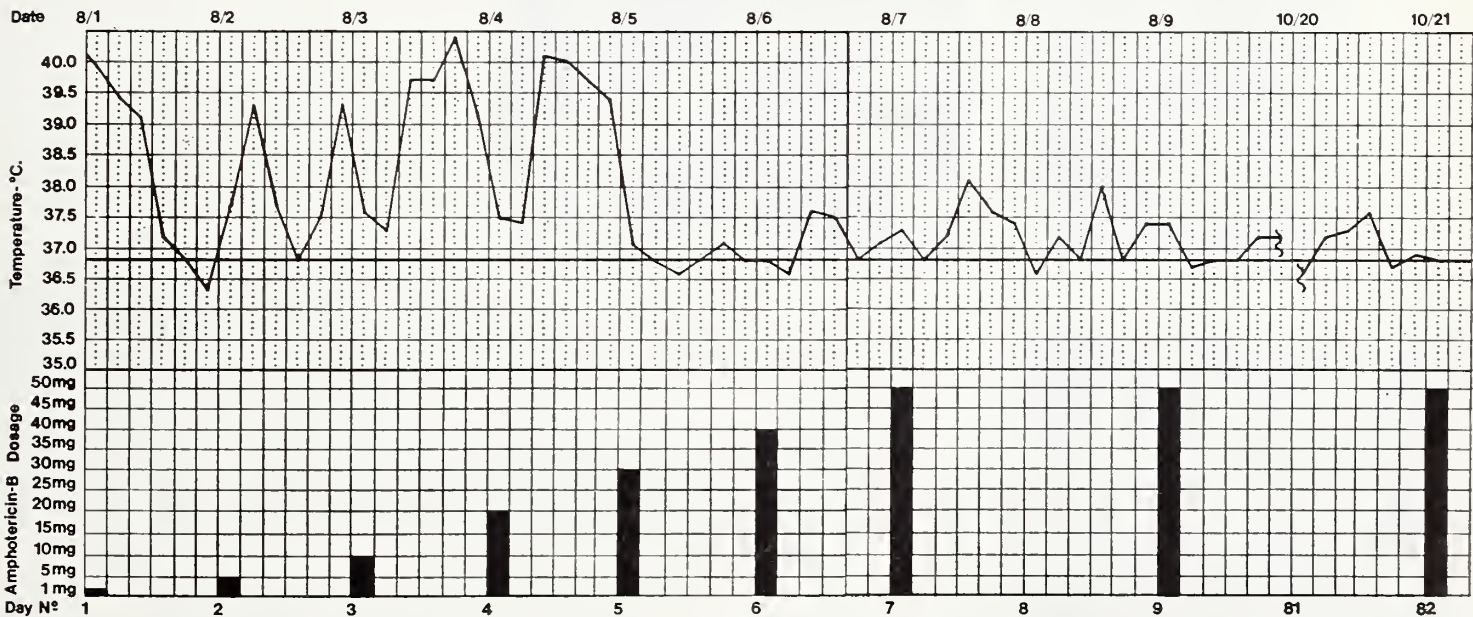


Figure 2. Temperature chart and increment dose of amphotericin B up to a total dose of 2 gm.

a successful therapy of disseminated histoplasmosis concomitant with advanced Hodgkin's disease.

Summary

A case of a long-term survivor of Hodgkin's disease treated with chemotherapy and radiation therapy, who later developed disseminated histoplasmosis involving the liver and bone marrow, is reported. The fungal infection was successfully treated with amphotericin B.

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Aphrodisiac Ingestion...

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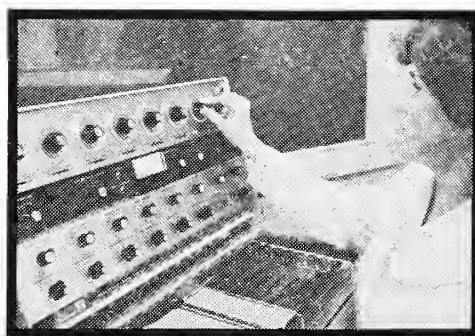
products.⁸ Unless the ingredients are known, the appropriate management of any ingestion of a purported aphrodisiac depends upon the practice of the principles of emergency medicine and clinical toxicology as exemplified in our case reports.

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Drug-Related Immune Hemolytic Anemia

CHARLES E. KOSSMANN, M.D., Editor

RALPH L. AQUADRO, JR., M.D.:

A 50-year-old white man had a bleeding, pyloric-channel ulcer in November of 1971 for which a Billroth II resection was performed. In 1977 he had increasing fatigue, weakness and recurrent syncopal spells for two months which brought him to his private physician one month before hospitalization. A low hematocrit was found and he was started on oral iron and Maalox. On follow-up examination his symptoms had increased. Attempts at typing and cross-matching his blood were made numerous times but no compatible blood could be found.

He was admitted to the Veterans Administration Hospital on Dec. 15, 1977 for reevaluation of the anemia and transfusion if needed. The past history revealed hypertension for three years, treated for two years with hydrochlorothiazide 50 mg qd and methyldopa 250 mg qid but the latter was increased to 500 gm qid four months prior to admission. Review of systems was negative for melena, hematochezia, and hemoptysis but was positive for fever and chills one day before admission.

The rectal temperature was 102 F, pulse rate 120/min and irregular, blood pressure 100/60 mm Hg, and respirations 25/min. He was lethargic, pale, diaphoretic and in moderate distress. The sclerae were icteric and the mucous membranes pale. There was a grade II/VI holosystolic murmur at the left and right sternal borders. There was a liver span of 12 cm by percussion but the spleen was not felt. Bowel sounds were within normal limits and there was no abdominal tenderness. Rectal examination was normal, and the normal colored feces were negative on guaiac test. Neurological examination was normal.

The hematocrit was 21%; the MCV was 106 cu μ , MCH 31.5 pg, MCHC 29.2% with a reticulocyte count of 11.8%. The white blood cells were 11,000/cu mm with a normal differential count. The platelets were within normal range in number and appearance. Total bilirubin was 2.6 mg/dl, with an indirect fraction of 2.1 mg/dl. Serum haptoglobin was 5 mg/dl (normal 30-200 mg/dl). The direct and indirect Coombs' tests were positive. The erythrocyte glucose-6-phosphate dehydrogenase (G-6-PD) and the sugar water test were normal. Fluorescent antinuclear antibodies (FANA) and rheumatoid factor were absent. Serum lactic dehydrogenase was 1,380 U/ml (normal 60-120 U/ml). The abnormal electrocardiogram and the elevated cardiac enzymes were interpreted as evidence of acute subendocardial necrosis. Cultures of the blood, urine, and sputum showed no growth. The peripheral blood disclosed red cells with diffuse basophilia, and many

spherocytes and microspherocytes. The serum immunoglobulin electrophoresis, folate, and B₁₂ were normal.

The impression was that the patient had autoimmune hemolytic anemia and acute subendocardial infarction. The methyldopa was withdrawn and he was transfused but the blood continued to hemolyze. He was then started on, and responded well to, prednisone. The hematocrit rose gradually to 30% without further transfusion.

LUTHER L. BURKETT, M.D.:

Hemolytic anemia secondary to an immunologic reaction mediated by drugs is a significant problem; 16% to 18% of all acquired hemolytic anemias are of this type.¹ I am speaking of drug-induced, *immune* hemolytic anemias and not those which result from drugs in a patient whose red cells are intrinsically defective. The drug-induced anemias are of interest not only because of their frequency but also because one type, that caused by methyldopa, cannot be distinguished from idiopathic autoimmune hemolytic anemia in any way except that it develops while a patient is getting the drug and subsides after the drug is stopped; otherwise, the two anemias are serologically and clinically identical.

Classification of Drug-Related Hemolytic Anemia

Drug-induced immune reactions affecting the red cells have been classified into three types depending on the mechanism of hemolysis^{1,2} (Table 1). The first type, the least common, was first noted to occur with the antiparasitic drug, stibophen, and subsequently with drugs more commonly used including quinine, quinidine, sulfonamides, isoniazid, the phenothiazines and phenacetin. Characteristically, the affected patients have taken the drug for a variable period of time or on repeated occasions. Then, with readministration of a small amount of the agent, they suddenly display acute intravascular hemolysis.

The second type occurs predominantly with penicillin although described also in a few patients receiving cephalosporins. A very high blood

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Memphis Veterans Administration Hospital Case No. 7924. Presented Jan. 11, 1978.

TABLE 1
CLASSIFICATION AND CLINICAL GENERATION

	Dosage and Administration	Hemolysis
Immune		
Stibophen type	Small dose, read-ministration	Intravascular
Penicillin type	Continuous therapy with massive doses	Extravascular
Autoimmune		
Methyldopa type	Long-term therapy with standard doses (1 gm/day or less)	Extravascular

level of the drug seems to be required over a period of several days before the onset of a more insidious hemolytic anemia. The third type, represented by methyldopa-induced hemolytic anemia, has also been seen rarely with two other drugs, levodopa and mefenamic acid, the latter an analgesic used in England. A significant percentage of patients who receive methyldopa will develop a positive, dose-related, direct Coombs' test.³ The positive test appears between three and six months after administration of the drug is started. Eleven percent of patients who take less than 1 gm of methyldopa per day, 21% of those who take from 1 to 2 gm per day, and 36% of those who take 2 gm or more a day will develop a positive Coombs' test. This does not mean that all of these patients have hemolytic anemia; in fact, only a small fraction of them do. Only about 1% of patients on methyldopa develop hemolytic anemia; the incidence of hemolysis is not so clearly dose-related as is the development of the positive Coombs' test. It may be that there is a sub-set of patients who are particularly susceptible to the development of red cell dissolution. If the methyldopa is discontinued, whether hemolytic anemia has developed or not, the Coombs'

test will remain positive for one month to two years after discontinuation of the drug.

I should mention one other type of drug-red cell interaction which does not produce hemolytic anemia,¹ but which is important because it may lead you to believe that the patient has hemolytic anemia, and because it may present some problems with cross-matching. This is a non-immunologic positive Coombs' test seen particularly with the administration of the cephalosporins. A high blood level of cephalosporins, resulting from either large doses or renal insufficiency, will alter the red cell membrane so that it adsorbs not only γ -globulin and complement, but a number of other proteins including albumin, α -1 antitrypsin, and α -2 macroglobulin, any one of which may be detected by a polyvalent Coombs' antiserum. This is important to recognize since most of these patients do not have evidence of hemolysis with the exception of a rare patient on cephalothin.

Mechanism of Immune Hemolysis

The mechanism by which the immune hemolysis occurs in these different types is suggested by the results of in vitro Coombs' testing (Tables 2 and 3). In the stibophen type, the direct Coombs' test will be positive immediately after the hemolytic episode. If monospecific antiserum is used, the material coating the red cell is complement (C₃). Immunoglobulin is not found on the red cell, or at least is not detected by monospecific immunoglobulin antiserum. We know, however, that the antibody involved is usually IgM, although occasionally it is IgG. The indirect Coombs' test, if done by adding normal red cells to the patient's serum, will be negative; that is, normal red cells are not sensitized by an antibody in the patient's serum. Likewise, if we heat the patient's serum to inactivate complement, and

TABLE 2
COOMBS' TESTS AND IMMUNE GLOBULINS INVOLVED

	Direct Coombs'		Indirect Coombs'		Antibody
	Anti-gamma	Anti-C'	Serum	Serum & Drug	
Stibophen type	Usually negative	Positive	Negative	Positive	IgG, IgM
Penicillin type	Positive	Negative	Negative*	Negative*	IgG
Methyldopa type	Positive	Negative	Positive†	—	IgG (Anti-Rh)

* Positive with penicillin coated RBC.

† Remains positive after discontinuance of drug.

then add the drug and normal red cells, the indirect Coombs' test still will not be positive. However, if this is done with the addition of a complement source, the indirect Coombs' test then becomes positive, the material detectable on the red cell by Coombs' antiserum being complement. On the basis of these findings a so-called innocent bystander mechanism of sensitization of the red cell has been proposed according to which there is actually no component of the red cell itself that is immunogenic; it is thought rather that an antibody is developed against a drug-protein-immune complex which is nonspecifically adsorbed by the red cell surface. However, in being adsorbed, it also fixes complement to the red cell with resulting lysis. The immune complex itself will elute from the red cell, leaving only complement to be detected by the Coombs' test.

Penicillin and the cephalosporins, *in vitro* and *in vivo*, will become firmly bound to the red cell membrane so that they cannot be easily removed even with multiple washes. In an occasional patient who is on massive intravenous doses of penicillin, an antibody will develop against a penicillin derivative fixed to the red cell membrane. This is a so-called haptene mechanism. The direct Coombs' test in this case is positive, and monospecific antiserum reveals that the substance coating the red cell is immunoglobulin G. The indirect Coombs' test, if done using normal untreated red cells in the patient's serum, will be negative. However, if normal red cells are incubated with penicillin so that penicillin is bound to the surface, the indirect Coombs' test then becomes positive. Thus, the mechanism here seems to be formation of a heptene (drug)-carrier (red cell) complex with the antibody developing against this.

With either of the above two mechanisms, a positive indirect Coombs' test requires the drug itself in the reaction mixture, indicating direct involvement in the immunologic reaction. With the methyldopa type the direct Coombs' test is positive, the coating substance being IgG, but

the indirect Coombs' test remains positive for many months after the patient has been taken off the drug.³ Therefore, sensitization of the red cell by this antibody does not require the presence of the drug, which is of interest because this particular type involves more than an immunologic reaction in which the drug itself directly participates. It has been determined that the antibody is directed against some component of the Rh antigenic complex, as in the case of idiopathic autoimmune hemolytic anemia.

We can postulate two mechanisms for this type of drug-induced hemolytic anemia. First, it has been proposed that there is an alteration of the Rh antigen by methyldopa, which then becomes "auto-antigenic." This does not seem likely because the alteration in the red cell antigen persists many months longer than the life span of the red cell, and up to two years after the patient has discontinued therapy. A more likely mechanism would seem to be some effect of methyldopa on the immune system itself as a result of which a "forbidden clone" of B cells,⁴ capable of forming antibodies against the Rh complex, evolves and results in hemolytic anemia. Some preliminary data have suggested that methyldopa may affect suppressor or regulator T cells in such a way that immunologic tolerance is lost. It would affect a regulator T cell in such a way that the B lymphocyte coded for formation of anti-Rh antibodies escapes suppression and is allowed to proliferate. At the present time, this is theoretical but it seems more plausible than an alteration in the red cell antigen itself.

Therapy

Therapy is not usually a problem if the cause of the anemia is recognized. The stibophen type can produce severe intravascular hemolysis with hemoglobinemia, hemoglobinuria, and acute tubular necrosis, but usually the patients do well when the drug is stopped and the acute tubular necrosis managed appropriately. The second type will resolve rapidly once the penicillin is stopped. However, if not recognized, the patient may go on to develop a profound anemia. Also, with the methyldopa type, the hemolytic anemia usually begins to improve as soon as the drug is stopped. It is generally not necessary to treat them with adrenal corticosteroids. An occasional patient, however, will have persistent severe hemolysis for a period of time and will require prednisone therapy as this patient did. A few patients have died as a result

TABLE 3
MECHANISMS OF HEMOLYSIS

Stibophen type	"Innocent bystander" Red cell-haptene complex
Penicillin type	Firm binding of drug by red cell (haptene?)
Methyldopa type	Alteration of Rh antigen? Alteration in immunocytes with loss of immune tolerance?

of methyldopa hemolytic anemia.

One other thing to be mentioned in reference to the methyldopa type of hemolytic anemia, which applies to idiopathic autoimmune hemolytic anemia as well, is the problem of transfusion. It is very difficult to decide to transfuse these patients, because if they have a positive indirect Coombs' test, it is impossible to get a compatible cross-match. If the patient has antibodies in his serum which are reactive with normal red cells, a positive Coombs' test is found when donor red cells are tested in his serum so that you cannot get a compatible cross-match if you are using the test to establish compatibility, as is ordinarily done. In this case, if the patient had to have transfusions, it would have been best to select the blood which is "least incompatible" by gross agglutination; the probability is that the patient will have no problems and will not hemolyze the transfused cells any more rapidly than he does his own. An exception would be the presence of an alloantibody which has developed as a result of a previous transfusion or pregnancy. This would be difficult to detect, serologically, and if the patient has such an alloantibody and is given incompatible red cells, massive hemolysis of the transfused red cells results. It is likely that such a mechanism caused the hemolytic reaction to transfusion in the patient presented.

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Biochemical Consequences of Diuretic Therapy in Hypertension

JOHN W. HOLLIFIELD, M.D.

Diuretics are well recognized as a cornerstone of antihypertensive therapy. The National High Blood Pressure Education Program guidelines for the standard therapy of the uncomplicated hypertensive patient call for the use of a thiazide-type diuretic as the first step leading to hypertension control.¹ A sizable portion of patients with hypertension, particularly of mild to moderate degree, respond sufficiently to diuretics that their blood pressure is ameliorated and they do not require additional antihypertensive agents. Almost all of the remaining patients with blood pressure elevation require diuretics to augment the antihypertensive effects of an adrenergic blocker or vasodilator in the treatment of their hypertension.

Since thiazides are so widely used in the treatment of blood pressure elevation and form an integral part of the therapeutic program of the majority of the patients with blood pressure elevation, it seems worthwhile reviewing some of the predictable biochemical consequences of diuretics which relate to their effect on the kidney and fluid electrolyte balance. The particular biochemical alterations which are most pronounced include hypokalemia, hyperuricemia, hypercalcemia, and hyperglycemia.

Studies by the Vanderbilt Endocrine Hypertension Group have indicated that the blood pressure response to hydrochlorothiazide as well as all other known diuretics is related to the dose of drug administered. In a similar fashion we have demonstrated that a dose-response relationship exists between the dose of thiazide administered and the biochemical consequences of diuretic therapy.

Hypokalemia:

Small doses of hydrochlorothiazide (50 to 100 mg daily) result in minimal but definite changes in serum potassium during a one- to two-month

period of administration of the drug.¹ The alterations in serum potassium, however, become more pronounced when initial therapy has extended up to six months.

Higher doses of hydrochlorothiazide (150 mg daily) result in more profound initial antihypertensive therapy even during short-term follow-up. In long-term six-month studies, more pronounced changes in serum potassium are noted. Using a special technique for the measurement of whole body potassium, our group has also shown that it is decreased during acute therapy with hydrochlorothiazide, and these changes become even more profoundly affected by chronic hydrochlorothiazide. The relative change in whole body potassium is not as profound, however, as the change in serum potassium.^{1,2}

Similar changes in potassium have been noted with other thiazide-like diuretics including metolazone, furosemide, salacrine and chlorthalidone.¹

Uric Acid:

The thiazide diuretics are well known causes of elevation of serum uric acid and may precipitate acute gout in the susceptible individual. There appears to be a dual mechanism for this phenomenon. The weak acid diuretics compete with uric acid for secretion sites in the distal renal tubule, and in addition the contraction of extracellular fluid volume which is induced by thiazide diuretics will result in increased proximal tubular reabsorption of uric acid and hence hyperuricemia.³ As with potassium, the effect of hydrochlorothiazide in raising serum uric acid is proportional to the dosage of drug administered. This is directly related to the decrease in blood pressure associated with thiazide administration. The effects of other thiazide-type diuretics such as metolazone, salacrine, furosemide and chlorthalidone are similar, and the incremental increase in serum uric acid associated with equally potent doses of these other diuretic compounds is also

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quite similar.¹

Hypercalcemia:

The effects of thiazide diuretics on calcium metabolism with a resultant decrease in urinary calcium excretion and elevation of serum calcium are well documented, although the mechanisms through which thiazides produce hypercalcemia are poorly understood. Studies in uremic and anephric man indicate that hypercalcemia can occur without functional renal tissue. It has been suggested by some investigators that parathyroid hormone is required for this phenomenon, and another hypothesis is that thiazides themselves stimulate the release of calcium from bone, particularly in states which are characterized by rapid bone turnover. The hypercalcemia associated with thiazide therapy is generally mild, and aside from the necessity of considering other etiologies of the hypercalcemia there is little clinical significance to the thiazide-induced hypercalcemia. Again, as with potassium and uric acid, the rise in serum calcium appears to be a dose-dependent phenomenon with incremental increase in hydrochlorothiazide dose from 50 to 150 mg daily resulting in significant increases in serum calcium. Similar diuretics including metolazone, salacrine, furosemide and chlorthalidone all have similar effects in causing incremental (dose-dependent) rises in serum calcium.^{1,4}

Furosemide on the other hand does not cause elevation of serum calcium, and in our studies there was an insignificant fall in serum calcium. None of five patients developed hypercalcemia during the period of an intense study.

Hyperglycemia:

Elevation of serum glucose and development of frank diabetes are well documented complications of thiazide therapy. Diuretics similar in

structure to the thiazides are also well known to cause elevations of serum glucose. However, not all patients treated with thiazide diuretics develop hyperglycemia. It appears that the development of hyperglycemia is related to the initial glucose level, so that the greater the initial glucose, the greater the change in glucose induced by treatment with thiazides.

No patients starting on thiazide therapy with fasting blood sugars less than 100 developed significant hyperglycemia, and in 22 patients observed, there was no significant change in the fasting serum glucose. On the other hand, in patients whose initial blood sugar was greater than 150 there were significant changes in fasting serum glucose varying between 48 and 270 mg% increases.

Again, as with the other biochemical consequences of chronic diuretic therapy, there was a dose-dependent relationship between elevation of serum glucose and dose of thiazide administered. This relationship also paralleled the incremental fall in blood pressure induced by thiazide therapy.

Hypokalemia, hyperuricemia, hypercalcemia and hyperglycemia are commonly associated with thiazide and other similar diuretic therapies for the treatment of hypertension. These biochemical consequences are related to the dose of diuretic administered.

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X-ray of the Month

THOMAS B. JONES, M.D. and A. JAMES GERLOCK, JR., M.D.

A 46-year-old white man presented to the Emergency Room at 11:30 on Friday night after being involved in a motor vehicle accident. He complained of left flank and mid-back pain. There was no hematuria. X-rays revealed no evidence of fracture, but the flank pain was increasing in severity. Figure 1 is from the patient's emergency IVP. What should be done next?

- (1) Admit overnight for observation and get delayed films in the morning.
- (2) An emergency angiogram.
- (3) Nothing. The diagnosis is congenital absence of the left kidney, confirmed by nonfunction on the IVP and absence of hematuria.
- (4) Admit and observe. Schedule angiography for the next morning unless the patient's condition deteriorates during the night.



Figure 1. Emergency IVP of patient involved in motor vehicle accident.

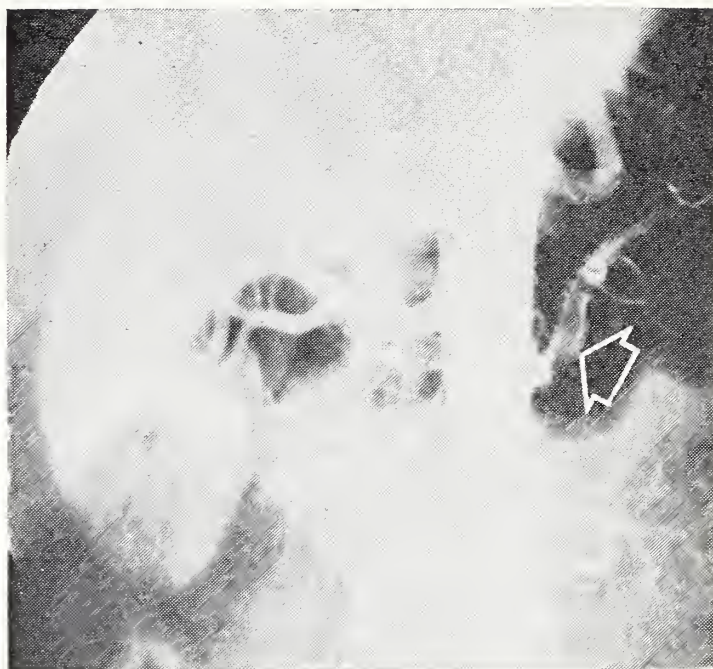


Figure 2. Emergency angiogram showing traumatic thrombosis of left renal artery.

Discussion

Figure 2 is from the emergency angiogram, demonstrating traumatic thrombosis of the left renal artery. Although successful revascularization of the kidney has been attained 12 hours after such an injury, most of these vascular injuries will necessitate a nephrectomy after approximately three hours of ischemia.^{1,2} In the race against time to save the kidney, the only correct answer is (2) emergency angiography.

A diagnosis of congenital absence of the kidney cannot be made from an IVP showing nonfunction and a negative urine. Even complete avulsion of the renal pedicle frequently does not produce hematuria.³

Prompt angiographic evaluation of the non-functioning kidney following trauma may allow the proper diagnosis to be made in time to save the kidney. A simple delay of three hours in diagnosis will most likely result in nephrectomy.

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From the Department of Radiology, Vanderbilt University Hospital, Nashville, TN 37232.

EKG of the Month

W. BARTON CAMPBELL, M.D.

A 69-year-old man entered St. Thomas Hospital for evaluation of confusion, weakness, anorexia and weight loss with severe neck and back pain. Four years previously he underwent coronary arterial bypass grafting of the right and anterior descending coronary arteries. He was told at that time that he had intermittent atrial fibrillation. Examination on the present admission showed an elderly appearing white man who was slightly orthopneic, with a blood pressure of 150/70 and an irregularly irregular pulse. A grade II pansystolic murmur was heard at the apex. Rales were present in both lung bases, and the liver was palpable 10 cm below the right costal margin. He had modest clubbing of the fingers, and chest x-ray showed an infiltrative process on the right lung field. A rhythm strip showing standard leads I, II and III was obtained (Fig. 1).

Discussion

The electrocardiogram discloses an irregularly irregular rhythm with RR intervals varying from 0.90 seconds to 0.49 seconds. The RR interval in beats 3 to 9 is reasonably constant. The configuration of the P wave is variable, and there is a suggestion that some P waves (between beats 9-10 and between beats 11-12) may not be conducted. The PR interval also varies.

The combination of a rapid rate with an irregularly irregular rhythm, variable P wave morphology and varying PR intervals is the hallmark of multifocal atrial tachycardia. It is important to

distinguish this rhythm from atrial fibrillation in which striking irregularity is also often present. This differentiation is made by the identification of P waves (which will not be present in atrial fibrillation).

Multifocal atrial tachycardia occurs commonly in chronic pulmonary disease, more often in older patients who have underlying respiratory or metabolic problems. In contradistinction to atrial fibrillation, treatment of this arrhythmia with digitalis in an attempt to control ventricular rate is invariably unsuccessful and commonly results in junctional or ventricular ectopy or heart block. Although multifocal atrial tachycardia may be present with digitalization, it usually persists following cessation of digitalis therapy and is uncommonly a digitalis toxic dysrhythmia.¹ This arrhythmia responds better to treatment of the underlying metabolic problem than to any specific antiarrhythmic drugs. It is important, therefore, to distinguish it from atrial fibrillation with which it may be confused and which is often treated with digitalis and antiarrhythmic medications. This patient was found to have oat cell carcinoma of the lung and died two weeks after this rhythm strip was obtained.

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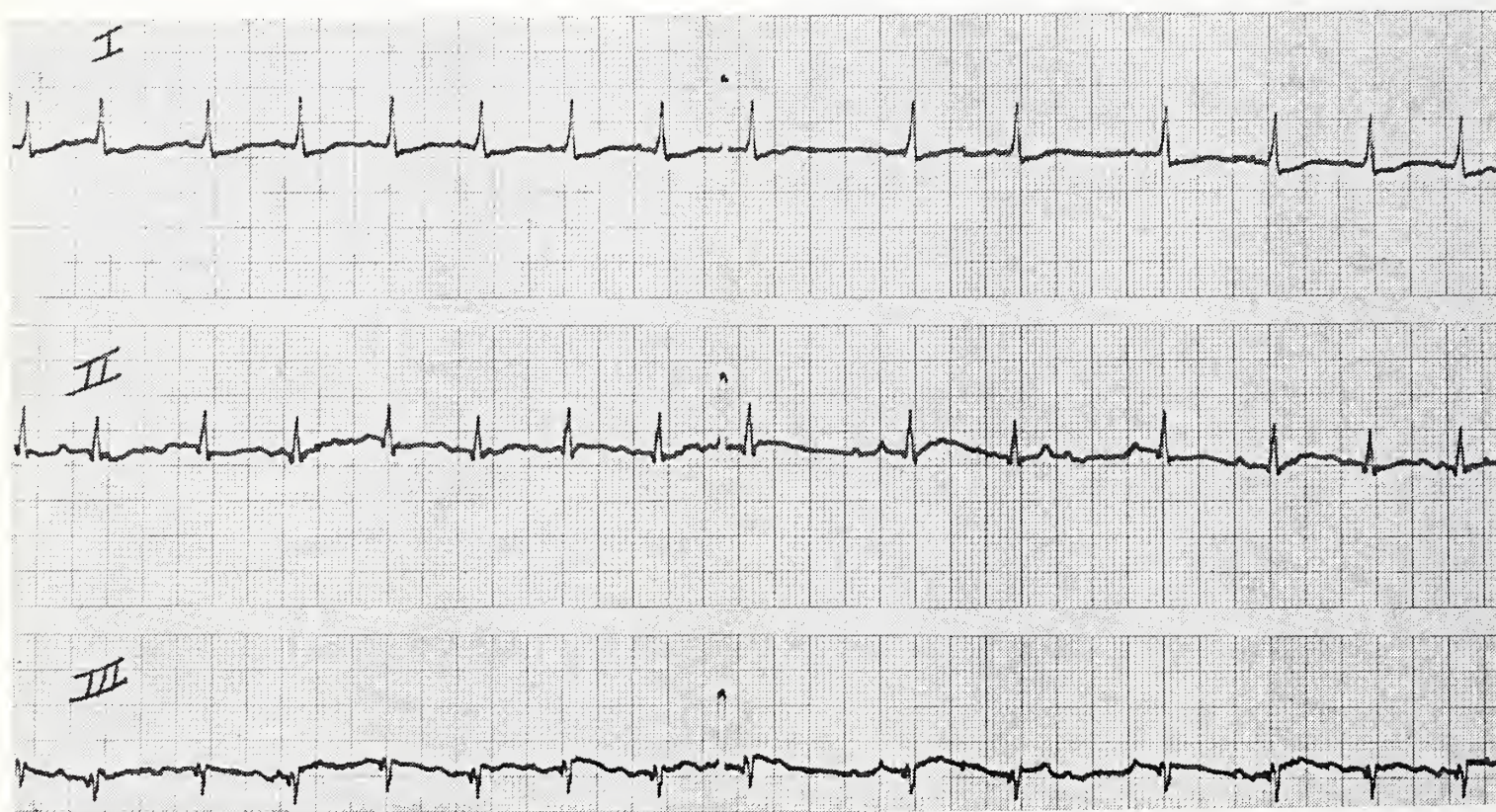


Figure 1

From the Department of Cardiology, St. Thomas Hospital, P.O. Box 380, Nashville, TN 37202.

What Is Normal?

JOSEPH J. SANNELLA, M.D.

One of the most frequent and perhaps frustrating questions the pathologist is called on to answer regarding laboratory tests is, "What is Normal?" In recent years the term "normal range" has been replaced by "reference range" . . . Our literature now reflects increasing contributions from biostatistics, decision theory, and systems analysis. Yet, for most of us, although the names have changed, the problem has not.

—Robert S. Galen, MD, MPH

Over the last decade, there has emerged a very large industry devoted to the development and manufacture of laboratory instruments and reagents. The scientific and engineering concepts, the production and packaging techniques, and the quality control of both equipment and reagent "kits" has been truly remarkable. Large and small laboratories (including office labs) can purchase a variety of highly dependable reagents for much less than the cost of "homemade brews." The kits enjoy very wide usage.

During this same period the industry has made important advances in standardization. Whenever possible, international units have replaced many of those units bearing the names of the original investigators. By doing so, the comparative elevations of several enzymes can more easily be used for both prognostic and diagnostic predictions. Competition has not only kept prices down but has stimulated development of simple and rapid procedures which reproduce the accuracy of reference methods.

The industry has fallen short in at least one major area, however, and that is in the establishment of "normal range." I only can recall a few instances where the normal range of a new test was based on the study of more than 100 individuals. University-based investigators have not performed much better. Many of the time-honored ranges are based on the study of a few score medical and nursing students, laboratory

workers, or blood donors. Such groups are hardly representative of the population as a whole.

Any laboratory introducing a kit method should critically compare its results with reference methods to make certain that the same analyte is being assayed in both systems. The second important step is to perform a normal range study. This can initially be done on a limited basis provided the resulting range agrees with that of the manufacturer. If it does not, a broader study is necessary. It may be easier and less costly to consider other kits rather than select and study a large normal population. If the results of limited normal range study agree with that of the manufacturer, the test can be introduced but the normal range should be periodically reassessed by examining distribution plots of all results.

Laboratories with computer systems have an enormous advantage. The computers usually have large storage capacity and statistical programs that enable rapid production of distribution plots, means, standard deviations and ranges based on very large numbers of patients. Larger systems enable laboratories to critically scrutinize the effects of both age and sex on reference ranges. In this way each patient can be compared to his true peers rather than to literature values derived from dissimilar populations in other geographic locations, with different ethnic mixes, dietary preferences, climatic conditions and so forth.

Another advantage of computer-generated distribution plots is that they make apparent the fact that the levels of many body constituents do not follow a Gaussian distribution in normal populations. Other formulae for determining reference ranges in these cases, such as selection of appropriate Pearson curves, can then automatically be applied to such data.

Physicians can expect constant modification of reference ranges. The sensitivity of many tests can be enhanced by developing proper peer comparison. The concept of "What is Normal?" is truly in transition.

From Clinical Laboratories of Nashville, 5 Park Plaza, Nashville, TN 37203.

Health Hazard Appraisal

Preventive health care, which has always been a primary concern of the Tennessee Department of Public Health, is now attracting an increasing amount of attention nationwide. The rising costs of medical care and the ever-increasing demands on the delivery system have heightened awareness that a significantly greater emphasis must be given to prevention. While education and counseling are important parts of today's medical practice, it appears that a more formally structured approach may have potential usefulness in preventive care.

This year the General Assembly appropriated funds to be used by the Tennessee Department of Public Health for the development of a pilot project in preventive care based on Health Hazard Appraisal. This program, which has been used fairly extensively across the country, shows promise of being effective in changing health-related behavior. It is based on the principle that each individual is a member of a specific group by virtue of his or her heredity, environment, personal history, age, sex, and race and, as such, faces certain definable hazards or risks. These hazards can be quantified by using probability tables derived from national death rates and known risks. Based on this information, it is possible to determine an individual's life expectancy over a ten-year period and the degree to which this prediction can be improved through changes in health practices, such as losing weight, taking more exercise, stopping cigarette smoking or using seat belts.

The demonstration project will have three main goals: (1) to call attention to the importance of prevention as an approach to health care, (2)

to make individual participants aware of their personal health status and encourage them to make responsible decisions about their own well-being, and (3) to measure the effectiveness of this particular program as a preventive health care tool.

Two specific target populations have been selected, one in the Nashville area and one in the Southwest Tennessee Health Region. Approximately 2,200 people will participate in the pilot project.

Counseling is an essential part of the Health Hazard Appraisal program. In the pilot project, 24 health professionals will receive specialized training for this purpose. After specific health hazards have been identified by means of a questionnaire, participants are urged to make commitments, in the form of individual contracts, to reduce their risks. Counselors then spend two hours a week for six to ten weeks working with the participants in an effort to effect lasting changes in lifestyle. At 6-, 12-, and 24-month intervals, participants will be checked to determine to what extent they have achieved their goals and changed their health status.

Based on the data collected, the program will be evaluated and the decision made as to its overall effectiveness and potential.

Physicians in private practice, industry, and other settings have found Health Hazard Appraisal or similar programs to be a useful tool in the practice of preventive medicine. Information on the program will be made available to practitioners and agencies who would like to consider this approach to preventive health care. Contact Ms. Jean Taylor, Tennessee Department of Public Health, Ben Allen Road, Nashville, TN 37216.

From the Tennessee Department of Public Health, Ben Allen Road, Nashville, TN 37216.

Developing Rural Mental Health Centers: A Perspective

HAROLD W. JORDAN, M.D. and MALETA BRATCHER

Mental health professionals have long faced many problems in providing services in rural areas. In the past, some state mental health authorities and legislatures, the United States Congress, and the executive branch of the federal government have been reluctant to divert limited mental health resources into rural areas.

There have been many reasons for this lack of enthusiasm. For one, in most states a majority of the population (taxpayers and voters) live in cities and suburbs, and population density has caused a demand for services. Local governments in many rural areas have traditionally looked to the state to provide mental health care, usually in large institutions, and many have been unwilling to share the responsibility for developing and supporting local mental health programs.

To further complicate the problem, mental health professionals have had to face a few myths about mental illness. One such myth states that people away from the hustle and bustle of city life live relatively uncomplicated lives and are not so subject to emotional stress.

We need only look at the case loads of rural mental health centers to dispel this myth. In most rural areas of Tennessee and other states, the severity of mental health problems equals or excels that experienced in the big cities.

Another common myth alleges that rural people are ignorant and this is supposed to grant them immunity from the usual psychological stresses experienced by urban people. The same

assessment has been made of blacks and other minorities. Facts overwhelmingly demonstrate that rural people have no sole claim on ignorance. Furthermore, the untrained and intellectually inferior can be as subject as the well educated and highly intelligent to emotional problems.

Another misconception accepted in the past is that rural people will not seek mental health care even if a center is placed in their community. We have found the community mental health center in Tennessee to become an established service delivery agency and an integral part of the community. Our community programs have become visible by opening clinics in many counties so that today 82 counties in Tennessee have at least part-time clinics operating within their boundaries.

Recruitment of professional personnel for rural mental health centers is a problem of long standing. Many psychologists, psychiatrists, social workers, nurses and other mental health professionals are reluctant to locate in rural areas. This may be a personal preference or it may have some basis in the fact that they feel more comfortable in the city.

In order to overcome the recruitment problem, a rural mental health center must offer advantages which will entice professionals to locate in the area. Salaries must be competitive with or higher than those paid by urban centers. Rural centers must affiliate with universities to offer practical experience sites for students in nursing, medicine, psychology, social work, and other areas of professional care.

A solution may often be found when a center seeks out those individuals who are native of the area or who come from a similar rural setting. Such employees often will not possess degrees which are recognized as belonging to the mental

From the Tennessee Department of Mental Health and Mental Retardation, Nashville, TN 37219.

Dr. Jordan is the Commissioner of Mental Health and Ms. Bratcher is the Director of Community Mental Health Services at the TDMHMR.

health profession, but when given the opportunity for on-the-job training and supervised practice, they can make unique contributions to the center's program.

One center in Tennessee used indigenous outreach workers to lay the groundwork for the establishment of centers in its remote counties. These workers were able to identify with the residents of the area, to obtain the participation of significant community leaders, and to communicate to the administration of the center the service needs which existed.

State mental health authorities must be willing to sponsor, encourage, and otherwise support the provision of innovative progress designed to serve rural populations. With the assistance of the Appalachian Regional Commission and state funds, one Tennessee center purchased a 35-foot van which served as a mobile mental health center to serve counties in the southeastern section of our state. This center operated until permanent clinic sites could be established.

In Tennessee, and in other states as well, home visits have not always been an integral part of all community mental health center services. In other areas, especially rural, they may be beneficial. Certainly they will be expensive. Not only does it cost a great deal to pay a professional to travel an hour or so to make a visit, but while he or she is on the road no clients are seen in therapy.

If rural mental health is to become a reality, decentralization is essential. Most state mental health authorities encourage the establishment of satellite programs in rural populations. They must also recognize the necessity to have centers become closely associated with other agencies, physicians, and persons in a care-giving role.

In-service training for mental health professionals in nutrition centers, senior citizens programs, health departments, head start programs, and schools provides many opportunities for enhancing the accessibility of mental health care. A major contribution of the community mental health center program is that it has made psychiatric care available to the masses. The days are past when we can be content to develop programs only in areas of great population density.

In Tennessee, we feel we have achieved much success in serving our rural clientele, but until every Tennessean has easy access to quality community mental health care, our task will not be complete.



BRIEF SUMMARY OF PRESCRIBING INFORMATION

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ORAL SUSPENSION

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 $\mu\text{g/ml}$) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions: Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth Oral Suspension is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

More detailed professional information available on request.

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New York, New York 10017

The Lunar Effect*

"Feeling irritable? A new book [the title of which heads this note] suggests it might be the moon," says an advertising blurb from Anchor Press. Dr. Arnold Lieber, its author, and a psychiatrist, analyzed homicides in Dade County, Fla., from 1955 to 1970 and found they peaked at full moon, fell below normal within 72 hours, then surged after the new moon. His hypothesis is that the moon exerts an effect on the water in our bodies—"biological tides"—similar to that upon the seas. Its gravitational pull upsets our fluid balance, making us tense and liable to emotional outbursts, for instance. The old, he says, are more susceptible than the young.

I didn't read the book. I'm sure it's interesting, but though its approach may be more scientific, its thesis is by no means new. Some time back I was browsing through some old newspapers in the public library, doing research on the 1873 cholera epidemic, and I ran across an item on the same subject, which might interest you as much as it did me. It might interest Dr. Lieber, too.—ED.

**The Lunar Effect: Biological Tides and Human Emotions. Arnold L. Lieber, MD, Anchor/Doubleday, New York, 1978, \$7.95.*

The Moon's Influence

Some of the Old Superstitions, Regarding It— Interesting to Farmers, Lovers, and Others

After testing the question again and again, modern meteorologists have come to the conclusion that the moon has no sort of influence over the weather, agreeing with the Iron Duke that it is nonsense to place any faith in her as a weather predictor. Time was when she was thought absolute mistress of the seasons. Pliny has the following lunar weather-wisdom: "Fine weather, wind or rain may be looked for according as the moon rises with a pure white, red, or swarthy light. If, at full moon, half the disc is clear, fine weather is betokened; if red, wind; if black, rain. If at the rising of the new moon the upper horn is obscured, there will be a prevalence of wet when she is on the wane; if the lower horn is obscured, there will be rain before she attains her full; if both horns appear obtuse, a frightfull tempest is near; if they are sharp and erect, high winds may be expected." Darwin declares it a sure sign of coming rain when the moon's head is hidden in haloes. A correspondent of *Notes and Queries*

says a large circle round the moon, with a north or northeast wind, predicates stormy weather; if the wind comes from any other quarter, there will still be rain, but less of it. If, however, the moon rises after sunset, the appearance of a ring round her is not so significant, as the Dutch rhyme puts it:

A ring around the moon
May pass away soon;
But a ring round the sun
Gives water by the ton.

An old Spanish proverb says the circle of the moon never filled a pond, but the circle of the sun wets a shepherd; while an English rhyme pronounces,—

If round the moon a circle's seen
Of white, and all the sky's serene,
The following day, you may divine,
Will surely prove exceeding fine.

And,—

Whene'er, in autumn or in spring,
A mist the moon doth with it bring,
At noon the sun will bright appear,
The evening be serene and clear.

The turning up of the horns of the new moon is another sign of fair weather. "There's no likeli-

hood of a drop now, an' the moon lies like a boat there," says somebody in *Adam Bede*. Southey notices this notion in one of his letters: "Poor Little Dale has this day explained the cause of the rains which have prevailed for the last five weeks, by a theory which will probably be as new to you as it is to me. 'I have observed,' he says, 'that when the moon is turned upwards we have fine weather after it, but when it is turned down it holds no water, like a brain, you know and down it comes.'" It is a very common belief that the weather depends upon the moon changing before or after midnight; a belief absurd on the face of it, since, as has been well observed, the moon may change before twelve at Westminster, and after twelve at St. Paul's. Dr. Adam Clark was oblivious of this fact when he put forth "A Weather Prognosticator," through all the lunations of each year forever; showing the observer what kind of weather will most probably follow the entrance of the moon into any one of her quarters, and that so near the truth as to seldom or never be found to fail. Our readers can easily decide as to the worth of the reverend doctor's weather-guide; they have only to note the time of the moon's entrance upon a new quarter, and compare the actual result with that anticipated by the "Prognosticator." It would be useless to quote his formulated observations, for, like all other prophecies concerning the lunar phenomena, there is a total neglect of the fact that weather is local and not universal. In other words, the change in the moon that it is supposed to have given good weather in the south of England has probably been attended with exceedingly bad weather in Scotland.

There is a time for all things; the difficulty lies in hitting upon the right time. No such difficulty disturbed the minds of the farmers of bygone days, who took my lady moon as their guide. They had only to ask themselves was she waxing or waning, and they knew what to do, and what to leave undone. An increasing moon was favorable to increase; a waning moon just the reverse. So, under the first, grain was cut, grafts inserted, eggs put under the hen, sheep sheared, and manure spread upon the land. Seeds were sown under a waning moon, in order that the young plants might have the advantage of growing with the moon.

Sow peas and beans in the wane of the moon,
Who soweth them sooner, he soweth too soon;
That they with the planet may rest and arise,
And flourish with bearing most plentiful-wise.

When the moon was at the full was the proper time to make ditches, tread out grapes, and cover up the roots of trees; seven days later being the finest period for grubbing up such as were to be removed. Timber, however, was not to be touched until the end of the second quarter, and then only when the moon was soon to change. The state of the moon, says Pliny, is all important when the felling of timber is in question, the very best time for the operation being during moon silence, or when she is in conjunction with the sun. Some, however, averred she ought to be below the horizon as well, and if the conjunction happened to fall upon the day of the winter solstice, timber then felled would be of everlasting duration. Even now, Devonshire apple growers prefer gathering their fruit at the shrinking of the moon, believing then it does not matter though the apples get bruised in the gathering, which is otherwise fatal to their preservation. Peat cutters aver that if peat be cut under a waning moon it will remain moist, and not burn clearly. The Brazillian mat-makers of Petropolis account for some of their mats wearing out too quickly, by reason of the canes having been cut at the wrong time of the moon. It is foolish, according to Suffolk notions, to kill a pig when the moon is waning; for if a pig be converted into pork at that time, the meat will invariably waste excessively when it comes to be cooked.

In Barray and South Ronaldsday they carry the waxing and waning theory still further, holding it unlucky to marry except under a growing moon. A skeptical writer, sneering at one of those who might have boasted like Falstaff, "We be men of good government, being governed as the sea is, by our noble and chaste mistress, the moon," says: "When the moon is in Taurus, he never can be persuaded to take physic; lest that animal, which chews the cud, should make him cast up again. If at any time he has a mind to be admitted into the presence of a prince, he will wait till the moon is in conjunction with the sun, for 'tis then the society of an inferior with a superior is salutary and successful."

From the *Nashville Union and American*
April 30, 1873



JOHN B. DORIAN

president's page

The Body Politic—Bull or Bear?

In a few days, a relatively few citizens will decide on still fewer who will control our governmental destinies for the next two to six years. Practically all of us know now whether we will exercise our franchise, and most have made our choices.

With optimism and enthusiasm, I would like to think one or more additional physicians might be influenced by this article to pull the lever on Tuesday, Nov. 7, 1978. In the 1974 general election, 1,471,000 Tennesseans voted; the number will certainly be higher this year.

Many groups exert influence far out of proportion to their strength in numbers. Notable are the media and the unions. Physicians also influence the outcome of political races, and they also exert it disproportionate to their numbers. But the potential for influence is tremendous when compared to the actual. TMA has 4,509 members, of whom 19% contributed \$25 or more to IMPACT (Independent Medicine's Political Action Committee—Tennessee). Of those candidates receiving support from IMPACT in the 1976 general election, 73% were successful in their campaigns. That is an impressive record, and this type of performance has been typical since IMPACT's inception.

Yet, a prominent reason (excuse?) some physicians give for not contributing is disagreement with the selection of candidates for support. The selection is made entirely by physicians who are informed and knowledgeable in political matters. That's enough for me; I need not agree with every choice to support the concept. IMPACT and TMA Board members are criticized and, occasionally, justifiably so, for the choices for support. Some of my "close, personal friends" (friend—a person with whom you'd care to dine; personal friend—a person with whom you'd care to dine and imbibe; close, personal friend—a person with whom you'd care to engage in sport [e.g., golf], and dine, and imbibe) are among the critics. So be it. I still believe 100% of TMA physicians must be members of IMPACT if our political potential is to be achieved.

Perhaps we physicians expect an unreasonable performance from successful candidates we support. What qualities, then, should a candidate possess? What attributes should a physician search for in a candidate?

There are three traits I believe to be essential. He should exhibit integrity of character. Secondly, he should have an attitude of concern for the general welfare (a smattering of patriotism, if you will). Finally, he must have an attentive ear in matters of health legislation. Listening to physicians' views is the sine qua non of meaningful laws related to health. It is certainly not essential that legislators agree with every physician in every health matter. It is not even possible. But to vote on such an issue without professional input is unthinkable to me.

In the third requirement above, I emphasize legislator. To me, the presidential, gubernatorial, and all local contests pale in importance when compared to the 535 national and the 132 state legislative races. *All* contributions from organized medicine should be distributed to candidates in these 667 races, of which 584 are repeated every two years. Obviously, it is exemplary for physicians to become involved individually in the other contests, but it's the law-makers who affect people's health care.

Physicians have been bearish too long in speaking for their patients via the political process. Union members contribute an hour's wage monthly to this same process. Some trade associations in Tennessee ask for and receive \$1,000 per member annually for political use. Reticence to participate in the game can only leave to others the making of the rules of the game.

Isn't it time for us to become bullish in seeking better legislation for our patients? Work, contribute, vote for better representation.

Sincerely,

John B. Dorian, M.D.
PRESIDENT

Journal of the Tennessee Medical Association

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DEVOTED TO THE INTERESTS OF THE MEDICAL
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OCTOBER, 1978

editorials

The Smoking Lamp Is Lit, or, Smudge Pot Revisited

This morning I followed a school bus down the road, one of thousands which twice each day foul the air of our countryside nationwide as they peddle their generally unwilling cargo to and from foreign neighborhoods. The air in Nashville last week was so thick you could almost part it with your hands, and each morning I cut my running time short because I could hardly breathe the

air in. Los Angeles, for years the city against which all other cities measured their air pollution, now has serious rivals as Pollution City, USA. I was in Denver a couple of weeks ago, after an absence of nearly 20 years, and the city I remembered as having the clearest air I had ever seen was enveloped in a murky pall, almost invisible from atop Pike's Peak. It is said to be second only to smoggy ole L.A. The Environmental Protection Agency has just issued a statement that air pollution is a major cause of death in this country, third, as a matter of fact, behind only heart disease and cancer. I'm not certain exactly how that figure was derived, but I certainly have no quarrel with it.

The other day I received in the mail a missive from the local representative of one of the larger tobacco companies. It was a reprint from the *Washington Post* reporting a statement by a prominent cancer investigator, one of the men who first called attention to cigarette smoking as a cause of cancer, to the effect that the tobacco industry now has several clean cigarettes on the market. This of course is a bonanza for the tobacco industry, inasmuch as more "clean" cigarettes are sold than the plain old "dirty" kind, because smokers are hooked on the dirty part, not the little paper tube. Any number of people have told me they smoke two or three times as many filter cigarettes as the nonfiltered sort. If the representative read the piece carefully, though, he would know it was not all that favorable, as the investigator was careful to point out that the only safe cigarette is the unlit cigarette. But then the dedicated smoker doubtless didn't read that far either.

If one thinks at all, he must sort of wonder, "Why bother?" A significant portion of the poisons our lungs are subjected to are a by-product of a cabal of doubtful parentage which as far as I can tell accomplished nothing anyone from any racial group likes except some judges who sometimes behave as if they were in their dotage. And yet we persist in the folly of long-distance busing of our school children, pauperizing our cities, and not really accomplishing what the order set out to do. I hold no particular brief for schools segregated along any lines, and I certainly am committed to equal educational opportunities for everyone. If busing has indeed led to equal educational opportunities, they are not equally superior but equally mediocre, as the school systems have spent all their money on buses, and they deplete their budgets annually

buying fuel for them; this also, along with other things, makes the public doubt the reality of a fuel shortage. No wonder city after city is refusing to appropriate money for their schools.

If we are serious about health care and reduction of health care costs, we need to develop some sort of consistency. We cannot say at once that cigarettes are dangerous and that belching buses are desirable; we cannot have the government both banning cigarettes and subsidizing the tobacco farmers. It makes a mockery of the whole effort, and it further erodes the already small confidence the people have in their government.

J.B.T.

Medical Atheists

One of the tragedies of modern medicine arises from one of its strengths. It is that owing to the vast knowledge we have acquired—much of it inconsequential, to be sure—we ignore journals not of our own specialty, and if we happen to run through a general journal, such as this one, we tend to look only for the things which will help us technically. One editor has gone so far as to say that as a group doctors are not educated people, and he could not waste his costly space catering to the interests of the few who could see beyond their own technical proficiency. As should be apparent from my own editorial activities, I do not agree with his assessment of our colleagues, believing rather that most doctors have natural inquisitiveness and broad interests, and that it is only the press of time and a surfeit of information that sometimes make us flip through journals looking for “pertinent” information.

Lest the title put you off, the article in this issue by Dr. Francis Braceland, this year's Frank H. Luton Lecture entitled “An Overview of Psychiatry,” is not just an overview of psychiatry. It is an overview of the medical scene in general, taken in historical perspective, by a very perceptive practitioner and editor who has watched the public abandon the shrines of the physician-priest to become a cult of “medical atheists.” Read it. It will help you be a better doctor in contemporary society, but better still it will stimulate your thinking, a welcome change from the stultifying effects of the daily fare of bad news and government regulations.

J.B.T.

National News

The AMA Washington Office in its wisdom has seen fit to cancel the National News column which

we have carried for so many years. They correctly point out that much of the news is outdated when it is written, and of course much more is by the time it reaches you.

As a substitute they sent the first of a series of what they refer to as “Washington Feature,” this one on medical manpower. It consisted mostly of nine pages of federalese garbage lifted direct, in quotes, from a General Accounting Office report. I read it. I didn't think you would, because I wouldn't have if I were in your place. Written by someone who knows how to write, leaving out the excess verbiage, it should have run two or three pages, typed.

Don't look for it. We didn't print it.

J.B.T.

Doing What Comes Naturally, or, So What Else Is New?

That thing that hath been, it is that which shall be;

And that which is done is that which shall be done;

And there is no new thing under the sun.

Ecclesiastes 1:9

In order to keep her head on her shoulders, Scheherazade came up with a continued story which lasted a thousand and one nights, long enough to win her a permanent reprieve. Will Rogers, a lowly Oklahoma cowboy, had the ear of presidents and kings, just as have court jesters from time immemorial. Wisdom, particularly if it is unpopular, is just a little easier to take if it comes with a light touch—in fact, even the intolerable may be tolerated if it comes from a comedian or a raconteur (or a comedienne or raconteuse, as the case may be). A contemporary example is Art Buchwald, who frequently packs quite a wallop in his column. You may not know the knife went in until you feel the barbs as it comes out.

A recent Buchwald column was concerned with the problems of unmarried couples living together, the gist of it being that if a married couple wishes to break up, all they have to do is turn the whole thing over to a lawyer and get a divorce, whereas no mechanism exists for single “roommates” to separate. Because of “rights” she can no longer just walk away, and he can't just throw her out. Buchwald's suggestion was that they simply get married, and then it will be easy.

Ever since Eve the fiction has been maintained, probably largely by women, that men have been in the driver's seat, and liberationists have al-

ways trotted out well-worn anecdotes to prove it, whereas if you have ever read or heard of Lysistrata (or of Eve) you understand that for the most part women have had the last word. In less sophisticated societies the women have been content to leave it that way. Because they are hardier and live longer they own most of the world's property. Why so many of them (not all, by any means, and not most of the wise ones) want to scrap the good thing they have going, and with ERA unnecessarily take responsibility for their own actions, and give men equal rights to just walk away, escapes me. It seems a high price to pay to avoid being looked upon (mostly by themselves) as "sex objects," particularly since most of those equipped for that title appear to enjoy it, and most of those who don't aren't interested in ERA, either, as ERA says not only that women are equal to men, but that men are equal to women, too.

To keep from painting myself into a corner, I will leave that and get on with the main subject, with which that has to do, but only peripherally. Babylon, Mycenae, France, and more recently Sweden have been looked down upon by the more sedate cultures as iniquitous because of the relaxed attitude they have taken toward sex. There used to be laws in this country against the sharing of quarters by unrelated members of the opposite sex. Now, along with Babylon, we have been emancipated (having joined Sodom, too). It has been, though, a mixed blessing, since as often happens the solution of one set of problems has led to another, and possibly more grievous, set. Buchwald has simply touched the tip of the iceberg.

I have had a good deal to say in these pages about liberty, which is freedom of action with responsibility, as opposed to license, translated "doing what comes naturally," which is freedom of action *without* responsibility. What comes naturally to man (I include women) in this particular area is to shack up PRN and dispose of the issue, if any, which we have become accustomed, in true Babylonian style, to give such euphemisms as "living together," "love," and so on, on the one hand, and abortion on demand on the other. More virtuous societies have called it fornication, adultery, and murder. Either way, it is doing what comes naturally. Another word for doing what comes naturally is "hedonism," which means self-gratification. To act otherwise requires commitment to others and to God, an old-fashioned concept.

What has made that concept old-fashioned is the capture of the mass media by individuals and corporations who either believe in the concept of doing what comes naturally or believe it will reward them financially or both. History shows that every culture and nation has started out under adverse conditions with self-sacrificing men and women having strong family, tribal, and national ties and sentiments. They have grown strong by hard work, devotion, and commitment, with intolerance of deviation from the norm of behavior. As survival became assured, controls relaxed and attitudes softened—not in itself bad. But liberty became license, and those who espoused the old ways were considered kill-joys, old "fuds." Commerce (making money) became all important and people became unimportant. Women began to act like men, life became a round of fun and games—the "good life."

In the end all those societies were overrun in turn by young nations made up of self-sacrificing men and women having strong family, tribal and national ties and sentiments, who grew strong by hard work, devotion, and commitment, with intolerance of deviation from the norm of behavior. As survival became assured. . .

J.B.T.



EKG Error

To the Editor:

It appears that a mistake has been made in the measurement of the QT interval of the EKG of the Month in the July 1978 issue of the Journal, page 521 (*J Tenn Med Assoc* 71:521, 1978).

At the most the QT interval is 0.44 seconds. P to P interval is approximately 0.96 seconds at a rate of 62 per minute. In the EKG shown in Figure 1, the T and P waves are not near each other as one would see with the mentioned QT interval of 0.82 seconds and P to P interval of 0.96 seconds.

Sarfraz A. Zaidi, M.D., Ph.D.
Associate Clinical Professor
East Tennessee State University
Johnson City, TN 37601

In Reply:

Dr. Zaidi's observations are correct. The wrong

electrocardiogram was inadvertently submitted from the patient's file and the QT interval was no longer prolonged.

My apologies to the readers of the *Journal of the Tennessee Medical Association* for this mistake.

W. Barton Campbell, M.D.
Co-Director, Dept. of Cardiology
St. Thomas Hospital
P.O. Box 380
Nashville, TN 37202

Pancreatitis—Does the Patient Have It?

To the Editor:

From the article concerning the diagnosis of pancreatitis ("Pancreatitis—Does The Patient Have It?" *J Tenn Med Assoc* 71:605,607, Aug. 1978), I and other readers might infer what Dr. J. Sannella did not wish to imply. That the amylase-creatinine clearance ratio provides not only increased specificity but also increased sensitivity over serum and/or one-hour urinary amylases.

It may be of interest to other readers that a recent study by William H. Farrar, M.D. and W. Graham Calkins, M.D. (*Arch Intern Med* 138:958-962, 1978) found the sensitivity of the amylase-creatinine clearance ratio inferior to that of either the serum amylase or the one-hour urinary amylase in 29 patients with acute pancreatitis. Moreover, they found that abnormal elevations of the amylase-creatinine clearance ratio showed less deviation from normal and values returning to normal sooner than those of either the serum or one-hour urinary amylases.

It might also be of interest to our clinician colleagues that D. A. Dreiling has in a summary article ("The amylase-creatinine clearance ratio." *Am J Gastroenterol* 61:290-296, 1974) recommended that all three tests (i.e., serum amylase, one-hour urinary amylase, and the amylase-creatinine clearance ratio) be routinely used in the evaluation of patients with possible acute pancreatitis. Farrar and Calkins reached the same conclusion.

It appears therefore, in the consideration of many, that the serum amylase and one-hour urinary amylase (because of their greater sensitivity disease) remain valuable adjuncts to the amylase-creatinine clearance ratio (with its acknowledged greater specificity) in the evaluation of patients with possible acute pancreatitis.

Robert M. Kisabeth, M.D.
Duckworth Pathology Group
Methodist Hospitals
1265 Union Ave.
Memphis, TN 38104

In Reply:

Dr. Kisabeth correctly points out that the paper by Farrar and Calkins (*Arch Intern Med* 138:958-962, 1978) indicates that the amylase-creatinine clearance ratio is less sensitive than serum amylase

and/or one-hour urine amylase determinations. This paper is at odds with my intended inference that the A/C clearance ratio provides respectable sensitivity as well as great specificity. I cannot accept the Farrar and Calkins study as a refutation because of their poor study design. They had three criteria a patient had to meet in order to gain entrance into their study. The first was an elevated serum amylase at the time of initial testing. This criterion inappropriately assigns 100% sensitivity to serum amylase determinations in diagnosing acute pancreatitis since the well-known false negative cases are excluded from the study. The second criterion was the necessity to have a history, physical examination and clinical course compatible with acute pancreatitis. No one would want to argue with this. The third criterion was that other GI diseases that could cause acute abdominal symptoms had to be absent. This is appropriate and necessary, however, the extent to which other diseases were ruled out is somewhat disquieting. For example, the authors state, "It is certainly possible that peptic disease was present despite normal roentgenograms. Very few of our patients had upper GI endoscopy to definitely confirm the absence of peptic ulcer disease."

The formula for sensitivity of a test is as follows:

$$\text{Sensitivity (\%)} = \frac{\% \text{ True} +}{\% \text{ True} + \text{ plus } \% \text{ False} -} \times 100$$

By not diligently applying criterion #3, the value obtained for % True Positives in the Farrar and Calkins study becomes questionable. Criterion #1 precluded any false negatives. Therefore, there is a very large component of bias in the production of the sensitivity data.

Farrar and Calkins offered "several explanations for the discrepancy between our results and those of others." And they concluded, "We have no good explanation as to why the results of our study differ from those previously reported."

I suggest that study design is the explanation. If an elevated amylase-creatinine clearance ratio had been a requirement for entrance into the study, the results would have been quite different but equally as unsatisfactory.

Joseph J. Sannella, M.D.
Medical Director
Clinical Laboratories of Nashville
5 Park Plaza
Nashville, TN 37203



Thomas Ellis, age 62. Died September 1, 1978. Graduate of University of Tennessee School of Medicine. Member of Washington-Carter-Unicoi County Medical Association.

Muriel E. Von Werssowetz, age 64. Died September

1, 1978. Graduate of University of Toronto School of Medicine. Member of Chattanooga-Hamilton County Medical Society.

James Fred Terry, age 74. Died September 11, 1978. Graduate of University of Tennessee School of Medicine. Member of Putnam County Medical Society.

new members

The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

BUFFALO RIVER VALLEY MEDICAL SOCIETY

James R. Wilkinson, M.D., Parsons

CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY

Yune-Gill Jeong, M.D., Chattanooga

John Stephen Rich, M.D., Hixson

Pe Than Tin, M.D., Chattanooga

CONSOLIDATED MEDICAL ASSEMBLY OF WEST TENNESSEE

Sarvotham Kini, M.D., Humboldt

KNOX COUNTY MEDICAL SOCIETY

Kameswara Rao Tatineni, M.D., Knoxville

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY

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Michael J. Magee, M.D., Memphis

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Verne E. Allen, M.D., Nashville

Peter N. Arrowsmith, M.D., Nashville

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Robert Lee Neaderthal, M.D., Nashville

David J. Switter, M.D., Nashville

Harry T. Tate, M.D., Madison

John B. Thomison, Jr., M.D., Nashville

Aubrey Lee Tucker, Jr., M.D., Nashville

Walter C. Udoji, M.D., Nashville

James L. Vincent, M.D., Nashville

Walter W. Wheelhouse, M.D., Nashville

Richard J. Wiet, M.D., Nashville

Jerry L. Word, M.D., Nashville

SEVIER COUNTY MEDICAL SOCIETY

David C. Chaffin, M.D., Sevierville

SULLIVAN-JOHNSON COUNTY MEDICAL SOCIETY

Phillip M. Ricks, M.D., Oak Ridge

R. Waid Shelton, Jr., M.D., Oak Ridge

programs and news of medical societies

Nashville Academy of Medicine

Lamar Alexander, Republican candidate for governor of Tennessee, addressed the joint membership meeting of the Nashville Academy of Medicine and MEDPAC at 7:30 p.m. Tuesday, Sept. 12, in the Kresge Learning Resources Center auditorium, at Meharry Medical College.

His Democratic opponent, Jake Butcher, was also invited to speak at this meeting but was unable to attend.

Alexander presented the main features of his political platform, including his views on current issues in medicine and health care. He stressed the need for medicine's involvement in the governmental process. Following his presentation, he conducted a question and answer session with the local physicians.

personal news

David Bruce Coffey, M.D., Onedia, has been elected by unanimous vote to serve as the Scott County medical examiner.

William B. Crenshaw, M.D., Nashville, has been elected president of the newly organized Tennessee Urologic Association. Other officers elected include *Lane Bicknell, M.D.*, Jackson, vice-president; and *Jack Butterworth, M.D.*, Bristol, secretary and treasurer.

Fletcher S. Stuart, M.D., Sewanee, has been named chief of medical staff at Franklin County Hospital.

announcements

CALENDAR OF MEETINGS

NATIONAL

1978

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| Oct. 28- | American College of Chest Physicians, |
| Nov. 2 | Hilton Hotel, Washington, DC |
| Oct. 31- | American Society of Therapeutic |
| Nov. 4 | Radiologists, Century Plaza Hotel, Los Angeles |
| Nov. 1-3 | American Hospital Association (Administration of Psychiatric Services in General Hospital)—Chicago |
| Nov. 1-4 | Society of Nuclear Medicine (Southeastern Chapter)—Birmingham Hyatt House, Birmingham, Ala. |

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|------------|---|----------------|--|
| Nov. 2-4 | Central Society for Clinical Research—
Drake Hotel, Chicago | | munology and Allergy—Americana Hotel, Bal Harbour, Fla. |
| Nov. 3-5 | American Association for Hand Surgery—Diplomat Hotel, Hollywood, Fla. | Nov. 12-17 | American Academy of Physical Medicine and Rehabilitation—Hyatt Regency, New Orleans |
| Nov. 4-5 | American Psychiatric Association (10th Biennial Meeting of Area II)—Waldorf-Astoria Hotel, New York | Nov. 17-21 | Gerontological Society—Fairmont Hotel, New Orleans |
| Nov. 5-10 | American Society of Maxillofacial Surgeons, Diplomat Hotel, Hollywood, Fla. | Nov. 26-Dec. 1 | Radiological Society of North America—Palmer House, Chicago |
| Nov. 5-10 | American Society of Plastic and Reconstructive Surgeons—Hollywood, Fla. | Nov. 29-Dec. 3 | Southeastern Conference on Alcohol and Drug Addiction—Marriott Hotel Downtown, Atlanta |
| Nov. 5-11 | American Association of Blood Banks—Hilton Hotel, New Orleans | Dec. 1-3 | American Academy of Psychoanalysis, Springs Spa Hotel, Palm Springs, Calif. |
| Nov. 8-12 | American Medical Women's Association—Don Cesar, St. Petersburg Beach, Fla. | Dec. 2-7 | American Academy of Dermatology, San Francisco Hilton, San Francisco |
| Nov. 9-11 | Symposium on the Management of Acute Trauma—Hyatt Regency Hotel, Atlanta | Dec. 13-17 | American Psychoanalytic Association, Waldorf Astoria, New York. |
| Nov. 11-14 | Southern Medical Association—Georgia World Congress Center, Atlanta | | |
| Nov. 12-16 | American Association for Clinical Immunology and Allergy—Americana Hotel, Bal Harbour, Fla. | | |

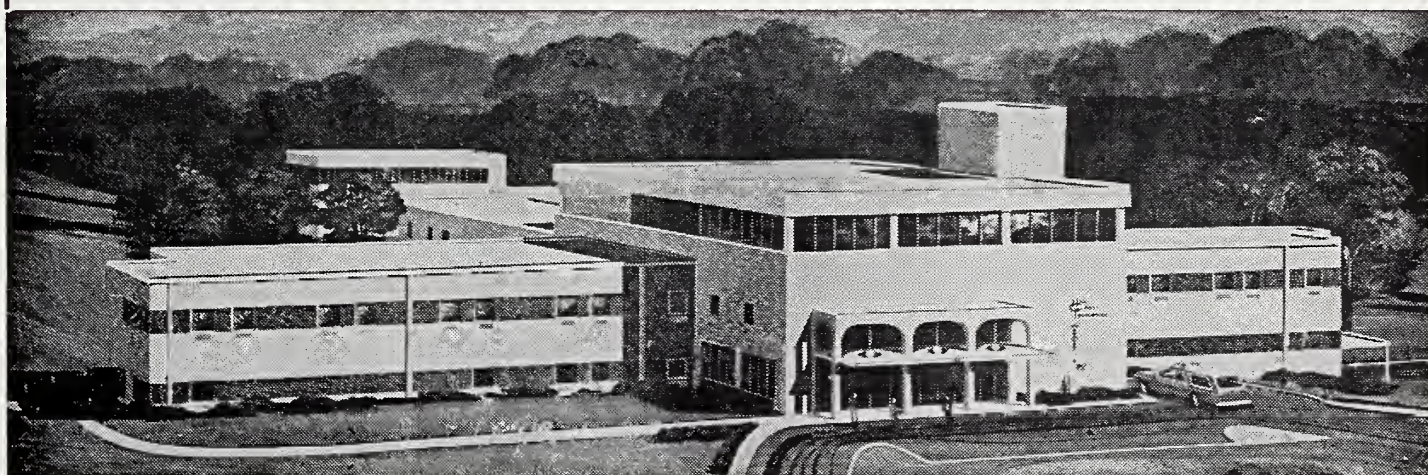
STATE

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| Nov. 1-3 | Tennessee Academy of Family Physicians, River Terrace and Civic Auditorium, Gatlinburg |
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Brief Summary

INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. **Drug Dependence:** Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. **Use in Pregnancy:** Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. **Use in Children:** Tenuate is not recommended for use in children under 12 years of age.

PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

ADVERSE REACTIONS: *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System:* Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria, rash, ecchymosis, erythema. *Endocrine:* Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System:* Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous:* A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in the evening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in the morning. Tenuate is not recommended for use in children under 12 years of age.

OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phenolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

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References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M.: A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

Merrell

8-3921 (Y587A)

The continuing medical education accreditation program of the TMA has full approval by the Liaison Committee on Continuing Medical Education. An accredited institution or organization may designate for Category 1 credit toward the AMA Physician's Recognition Award those CME activities that meet appropriate guidelines. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Ave., Nashville, TN 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

IN TENNESSEE

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Chest Diseases	James D. Snell, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Dermatology	Lloyd King, M.D.
Diabetes	Oscar B. Crofford, M.D.
Endocrinology	David Rabin, M.D. David N. Orth, M.D.
Gastroenterology	Steven Schenker, M.D.
General Internal Medicine	W. Anderson Spickard, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.
Medicine	Grant W. Liddle, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Oncology	Robert Oldham, M.D.
Orthopedics	Paul W. Griffin, M.D.
Pathology	William H. Hartmann, M.D.
Pediatrics	David T. Karzon, M.D.

Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Everette James, Jr., Sc.M., J.D., M.D.
Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sergent, M.D.
Surgery	
Cancer Chemotherapy	Vernon H. Reynolds, M.D.
General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neill, M.D.
Plastic	John B. Lynch, M.D.
Renal Transplantation	Robert E. Richie, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.

Eligibility: All licensed physicians are eligible.

Administrative Fee: \$200.00 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1) and American Academy of Family Physician's Continuing Education accreditation.

Application: For further information and application, contact: Paul E. Slaton, M.D., Director, Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

Continuing Education Schedule

October, 1978	William F. Orr Lectureship in Psychiatry
Oct. 31-	7th Annual Rhamy & Shelley Lectureship in Urology (16 hours)
Nov. 4	
Nov. 9-10	Symposium on Marital Therapy
Nov. 30-	American College of Physicians Regional Meeting
Dec. 1	
Dec. 1-2	High Risk Obstetrical Seminar (11 hours)
Jan. 20-21	Comparative Leukemia Conference
Feb. 14-15	1st Annual Harry S. Abram Memorial Symposium on Medical Ethics
Spring, 1979	Annual L. W. Edwards Memorial Lecture in Surgery (1 hour)
Spring, 1979	Annual Barney Brooks Lectureship in Surgery (1 hour)
Spring, 1979	2nd Annual Family Therapy Symposium
Spring, 1979	8th Annual James C. Overall Visiting Professor in Pediatrics
Spring, 1979	Family Practice Intensive Review (40 hours)
April, 1979	American Academy of Orthopedic Surgeons Short Course
April, 1979	Modern Concepts in Oncology
April, 1979	3rd Annual Gynecological Oncology Course (10 hours)
April 26	Annual Frank H. Luton Lecture in Psychiatry (1 hour)

May, 1979	Scientific Sessions of the Vanderbilt Medical Alumni Reunion
May, 1979	18th Annual Seminar in Psychiatry (for nonpsychiatrists) (10 hours)
July 25-29	2nd Annual Symposium on Contemporary Clinical Neurology (16 hours)
August-October, 1979	Internal Medicine Intensive Review (33 hours)

For information contact: Vanderbilt Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

MEHARRY MEDICAL COLLEGE SCHOOL OF MEDICINE

Extended Continuing Education Program

Arrangements have been made with the following services and departments in the medical school to allow practicing physicians to participate in that service's activities for a period of one to four weeks. This program provides an opportunity for physicians to study in depth for a specified period. The schedule of activities is individualized in response to the physician's request by the participating department. The experience includes conferences, ward rounds, audiovisual materials and contact with patients, residents and faculty.

Participating Departments

Anesthesiology	Ramon S. Harris, M.D.
Family Practice	John Arradondo, M.D.
Internal Medicine	
Cardiology	John Thomas, M.D. Kermit R. Brown, M.D. Qamar A. Kahn, M.D.
Chest Disease	Joseph M. Stinson, M.D. Paul A. Talley, M.D. Edward A. Mays, M.D.
Dermatology	Thomas W. Johnson, M.D. David Horowitz, M.D.
Gastroenterology	Ludwald O. P. Perry, M.D. Buntwal M. Somayaji, M.D.
General Medicine	Edward A. Mays, M.D.
Hematology/Oncology	Robert S. Rhodes, M.D. Robert S. Hardy, M.D.
Neurology	Calvin L. Calhoun, Sr., M.D. Gregory Samaras, M.D.
Obstetrics & Gynecology	Henry W. Foster, M.D.
Gynecological Endocrinology	Elwyn M. Grimes, M.D.
Ophthalmology	Axel C. Hansen, M.D.
Orthopedics	Wallace T. Dooley, M.D.
Pathology	Louis D. Green, M.D. John C. Ashhurst, M.D.
Pediatrics	E. Perry Crump, M.D.
Surgery	
General	Louis J. Bernard, M.D.
Neurological	Charles E. Brown, M.D.
Thoracic and Cardiovascular	David B. Todd, M.D. Ira D. Thompson, M.D.
Urology	Marcelle R. Hamberg, M.D.

Fee: \$100 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1), American Academy of Family Physicians Continuing Education Accreditation and Continuing Education Units by Meharry Medical College.

Application: For further information contact Frank A. Perry, M.D., Director, Continuing Education, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

For information contact Frank A. Perry, M.D., Director of CME, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

UNIVERSITY OF TENNESSEE CENTER FOR THE HEALTH SCIENCES

Continuing Education Schedule

This comprehensive listing of UTCHS courses includes programs of the Chattanooga, Knoxville, and Memphis units. The codes (C), (K), and (M) indicate the continuing education unit handling the arrangements for a particular program.

Oct. 26-27	(C)	Emergency Medicine (12 hours)
Oct. 26-28	(M)	Medical Alumni Day
Nov. 2-3	(M)	Clinical Evaluation & Management of Chronic Pain (10 hours)
Nov. 3	(K)	Lupus Symposium
Nov. 8-9	(M)	Use of Staplers in Surgery
Nov. 11-12	(K)	Tennessee Radiological Society Meeting (21 hours)
Nov. 21-Dec. 6	(C)	3rd Annual Perinatal Circuit Course (5.5 hours each)
Nov. 21		Copper Basin Hospital, Copper Hill
Nov. 28		Bradley Memorial Hospital, Cleveland
Nov. 29		South Pittsburgh Municipal Hospital, South Pittsburgh
Dec. 5		Athens Community Hospital, Athens
Dec. 6		Rhea County Medical Center, Dayton
Nov. 15	(C)	Nosocomial Infections
Nov. 17	(K)	7th Annual Internal Medicine Symposium (7 hours)
Nov. 24-Dec. 9	(M)	Symposium on Cardiovascular Disease—Mediterranean Cruise visiting Greece, Sicily, Gibraltar, Tangier, Casablanca and Portugal (35 hours)
Nov. 30-Dec. 1	(C)	Nephrology-Urology Update
Dec. 2-3	(C)	Glaucoma: Diagnosis and Management (9 hours)
Dec. 8-9	(M)	Otolaryngology for the Primary Care Physician (9 hours)
Dec. 26-Jan. 2	(C)	Medicine Update '79—Hawaii—Departing from Chattanooga (15 hours)

1979

- Jan. 13-20 (K) The Female Patient—Vail, Colo. (20 hours)
- Jan. 25-26 (C) Allergies in Clinical Perspective
- Feb. 3-10 (K) Family Practice Review & Update—Caribbean Cruise — Departing from New Orleans with stop in Havana (15 hours)
- Feb. 7-9 (M) Gynecologic Urology
- Feb. 9-10 (M) Human Performance & Cardiovascular Health
- Feb. 12-13 (M) Practical Office Dermatology
- Feb. 23-24 (C) Gut Problems: A Clinical Approach—St. Petersburg, Fla. (Tierra Verde) (12 hours)
- March 12-15 (C) Diagnostic Radiology for the Primary Care Physician—Sahara Tahoe, Stateline, Nev.
- March 18-24 (M) Review Course for Family Physicians
- March 29-30 (C) Pediatrics
- April 7-14 (C) Infectious Disease for the Clinician — Caribbean Cruise — Departing from Montego Bay
- April 16 (M) Modern Approach to Hypertension
- April 26-27 (C) Orthopaedics
- April 26-27 (M) Pediatrics—Behavioral and Learning Disabilities
- May 4-5 (K) 2nd Annual Family Practice Update and Review—Gatlinburg
- May 7-9 (M) 4th Annual Symposium on Reproductive Medicine
- May 10-11 (C) Rheumatology in a Clinical Practice—Gatlinburg
- May 11-12 (M) Modern Advances in Cancer Treatment
- May 17-19 (M) Practical Otolaryngology for the Primary Care Physician—Gatlinburg
- June 6-9 (M) Basic Electrocardiography—Pickwick
- June 7-10 (C) Family Practice Review Course
- June 11-14 (M) Fundamental Principles of Rhinoplasty
- June 25-28 (C) OB/GYN Emergencies—Orlando, Fla.
- Aug. 23-25 (M) ENT Postgraduate Review

For further information about any of these courses, please call the appropriate individuals below:

- (C) Mr. LeRoy J. Pickles, Chattanooga, Tel. (615) 756-3370
- (K) Dr. Harvey L. Goodman, Knoxville, Tel. (615) 971-3345
- (M) Ms. Grace Wagner, Memphis, Tel. (901) 528-5547

or, write or telephone:

Dennis K. Wentz, M.D.

Director of Continuing Education
University of Tennessee Center for
the Health Sciences
62 S. Dunlap St.
Memphis, TN 38163
Tel. (901) 528-5605

EAST TENNESSEE STATE UNIVERSITY

Continuing Education Schedule

- October Tennessee State Health Conference (co-sponsored by UT-Memphis, Vanderbilt, Meharry)
- Nov. 6-7 Child Development Clinic
- Nov. 16-17 Adolescent Medicine
- Dec. 4-6 Occupational Medicine
- Dec. 11-12 Southern Appalachia Regional Health
- Jan. 12 Stress and the Physician

For information contact Dr. Charles F. Johnson, Assistant Dean, East Tennessee State University, College of Medicine, Dept. of Continuing Medical Education, Johnson City, TN 37601, Tel. (615) 929-5364.

IN SURROUNDING STATES

UNIVERSITY OF KENTUCKY

Mini-Residencies for Medical and Surgical Practitioners in Office Management Of Emotional Problems

The objective of this course is to give physicians an ideal emotional counseling technique that fits busy office practices. The technique uses a concept of emotions that is consistent with human anatomy and psycho-physiology. Yet, the technique requires no more physician time or patient cost than routine evaluations of new patients. Finally, the technique is readily understandable and easy for practitioners to apply.

One, two and three week courses. Minimum of 40 hours per week. *Tuition Fee:* \$350 per week for the 1st & 2nd week of training; \$500 for 3rd week of supervised practice with patients in the Intensive RBT Treatment Program.

For further information contact: Maxie C. Maultsby, Jr., M.D., Office of Continuing Medical Education, Dept. of RBT, University of Kentucky, Lexington, KY 40506.

Continuing Education Schedule

- Nov. 3-4 Fiberoptic Bronchoscopy: A Workshop and —University of Kentucky Medical Center, Lexington. *Credit:* 13 hours AMA Category 1. *Fee:* \$300.
- Dec. 1-2
- Nov. 16-18 Cancer and Medicine 1978—Hyatt Regency Hotel, Lexington, Ky. *Credit:* 13 hours AMA Category 1. *Fee:* \$90.
- Dec. 10-15 9th Family Medicine Review (Session

III)—Hyatt Regency Hotel, Lexington, Ky. *Credit:* 50 hours AMA Category 1 and AAFP. *Fee:* \$295.

For information contact Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, KY 40506, Tel. (606) 233-5161.

UNIVERSITY OF LOUISVILLE

Nov. 8 14th Annual Louisville Pediatric Lecture
Nov. 9-10 12th Annual Newborn Symposium—
Health Sciences Center Auditorium,
Louisville.

For information contact Dr. Billy F. Andrews, Department of Pediatrics, University of Louisville School of Medicine Health Sciences Center, P.O. Box 35260, Louisville, KY 40232.

BOWMAN GRAY SCHOOL OF MEDICINE

Courses in Ultrasound

Three eight-week courses in sonic medicine will be offered at Bowman Gray School of Medicine on the following dates: Sept. 18-Nov. 10, 1978; Jan. 8-March 2, 1979; and April 2-May 25, 1979.

Credit: 30 hours per week in AMA Category 1. Three additional two-day real time courses are offered for obstetricians on Sept. 14-15, 1978; Nov. 16-17, 1978; and March 8-9, 1979. *Credit:* 10 hours per day in AMA Category 1.

Courses in Abdominal Real Time Sonography

A series of six week-long courses on the use of real time ultrasound in abdominal studies will be offered at Bowman Gray School of Medicine on the following dates: Dec. 4-8, 1978; March 12-16, June 11-15, July 16-20, Aug. 6-10, and Dec. 9-13, 1979. *Credit:* 30 hours per week in AMA Category 1.

For information contact James F. Martin, M.D., Director, Center for Medical Ultrasound, Bowman Gray School of Medicine, Winston-Salem NC 27103.

MEDICAL COLLEGE OF GEORGIA Continuing Education Schedule

Nov. 6-9	Laparoscopy and Colposcopy
Dec. 7-8	Family Dynamics
Feb. 8-9	Clinical Psychiatry
March 6-9	Emergency Medicine—Tamarron Ski Resort, Colorado
March 15-16	Reproductive Endocrinology
March 19-21	Neurologic Disorders
March 26-28	Ophthalmology*
April 4-6	Cardiology
April 19-20	Preventive Medicine
May 10-11	The Medical Office Team

June 7-9	Internal Medicine*
July 16-20	Taxes and Investments*
Aug. 6-8	Pediatrics*

*Presented at Holiday Inn of Jekyll Island, Ga.

For information contact Division of Continuing Education, Medical College of Georgia, Augusta, GA 30901, Tel. (404) 828-3967.

OF SPECIAL INTEREST

AMERICAN COLLEGE OF PHYSICIANS

A comprehensive schedule of continuing medical education activities for a 12-month period beginning in September, 1978, includes regional meetings and postgraduate courses to be held at various locations throughout the United States and Canada.

The ACP Regional Meetings, lasting one to four days, are designed for practicing internists and physicians in related fields. They bring new developments in the basic sciences and clinical medicine from major research centers to internists who are unable to travel to medical meetings outside of their state, and also provide a vehicle for local physicians to report to their colleagues on investigative work and clinical experiences in the wide scope of subject areas included in the practice of internal medicine.

The ACP Postgraduate Courses provide the opportunity for in-depth study in fields covered by internal medicine and its subspecialties. Averaging three to five days, they are directed toward practicing physicians and are presented in association with medical schools and other teaching institutions.

For information and registration contact: Registrar, Postgraduate Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

Regional Meetings

*See September 1978 issue for complete
1978-1979 listing*

Postgraduate Courses

*See September 1978 issue for complete
1978-1979 listing*

Dec. 4-8	Fluid and Electrolyte Balance, Hypertension and Renal Diseases—Chicago
Jan. 11-13	Recent Advances in Gastroenterology—Little Rock, Ark.
Jan. 22-26	Present Concepts in Internal Medicine—San Francisco
Jan. 29-Feb. 2	5th Stanford-Palo Alto Medical Research Foundation Winter Course in Infectious Diseases, Keystone, Colo.

BETH ISRAEL HOSPITAL Denver, Colorado

See September 1978 issue for listing

AMERICAN MEDICAL ASSOCIATION

Medical Staff Leadership Seminars—1978

Nov. 3-4 Eden Roc Hotel, Miami Beach

Credit: 14 hours AMA Category 1.

Fee: AMA member of medical society staff, \$150; nonmember, \$200.

For information contact AMA Department of Hospitals and Health Facilities, 535 N. Dearborn St., Chicago, IL 60610, Tel. (312) 751-6653.

ESTES PARK INSTITUTE

The Estes Park Institute, a non-profit educational organization, will sponsor Hospital Medical Staff Conferences and Hospital Trustee Forums at the dates and locations below. *Credit:* 30 hours AMA Category 1 (each location). *Fee:* \$190.

Nov. 12-16 Pacific Grove, California

Dec. 3-7 Clearwater Beach, Florida

For information contact Estes Park Institute, P.O. Box 400, Englewood, CO 80151, Tel. (303) 761-7709.

AMERICAN LUNG ASSOCIATION OF LOUISIANA

Dec. 12-16 4th Annual New Orleans International SUPERCOURSE (c) on Lung Disease—Hyatt Regency, New Orleans. *Credit:* AMA Category 1.

Dec. 12-16 11th Annual Postgraduate Course on "Newer Concepts of Care for Patients with Respiratory Disease" [in conjunction with SUPERCOURSE (c)]

Dec. 13-16 15th Annual Postgraduate Course on "Pulmonary Function in Health & Disease" [in conjunction with SUPERCOURSE (c)]

Dec. 13-16 8th Annual "Pediatric Pulmonary Course" [in conjunction with SUPERCOURSE (c)]

For information contact Howard A. Buechner, M.D., SUPERCOURSE Chairman, American Lung Association of La., Suite 500, 333 St. Charles Ave., New Orleans, LA 70130.

ALBANY MEDICAL COLLEGE

Jan. 4-17 20th Anniversary Cruise — aboard Queen Elizabeth 2 to Martinique, Bar-

bados, Grenada, LaGuaira. St. Thomas, and Nassau, departing from New York and Norfolk. Faculty from medicine, psychiatry, surgery, and cardiology. *Credit:* 34.5 hours AMA Category 1.

For information contact Frank M. Woolsey, Jr., M.D., Department of Postgraduate Medicine, Albany Medical College, Albany, NY 12208.

UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON

Jan. 26-27 Radiology of the Acutely Ill and Injured Patient—Update 1979—Stouffer's Hotel, Greenway Plaza, Houston. *Credit:* 14 hours AMA Category 1; ACEP and AAFP applied for. *Fee:* \$150.

For information contact Division of Continuing Education, University of Texas Health Science Center at Houston, P.O. Box 20367, Houston, TX 77025, Tel. (713) 792-4671.

UNIVERSITY OF MIAMI

Jan. 29- Feb. 2 6th Annual Neurological Update Symposium—Konover Hotel, Miami Beach. *Credit:* 6, 24, or 30 hours AMA Category 1.

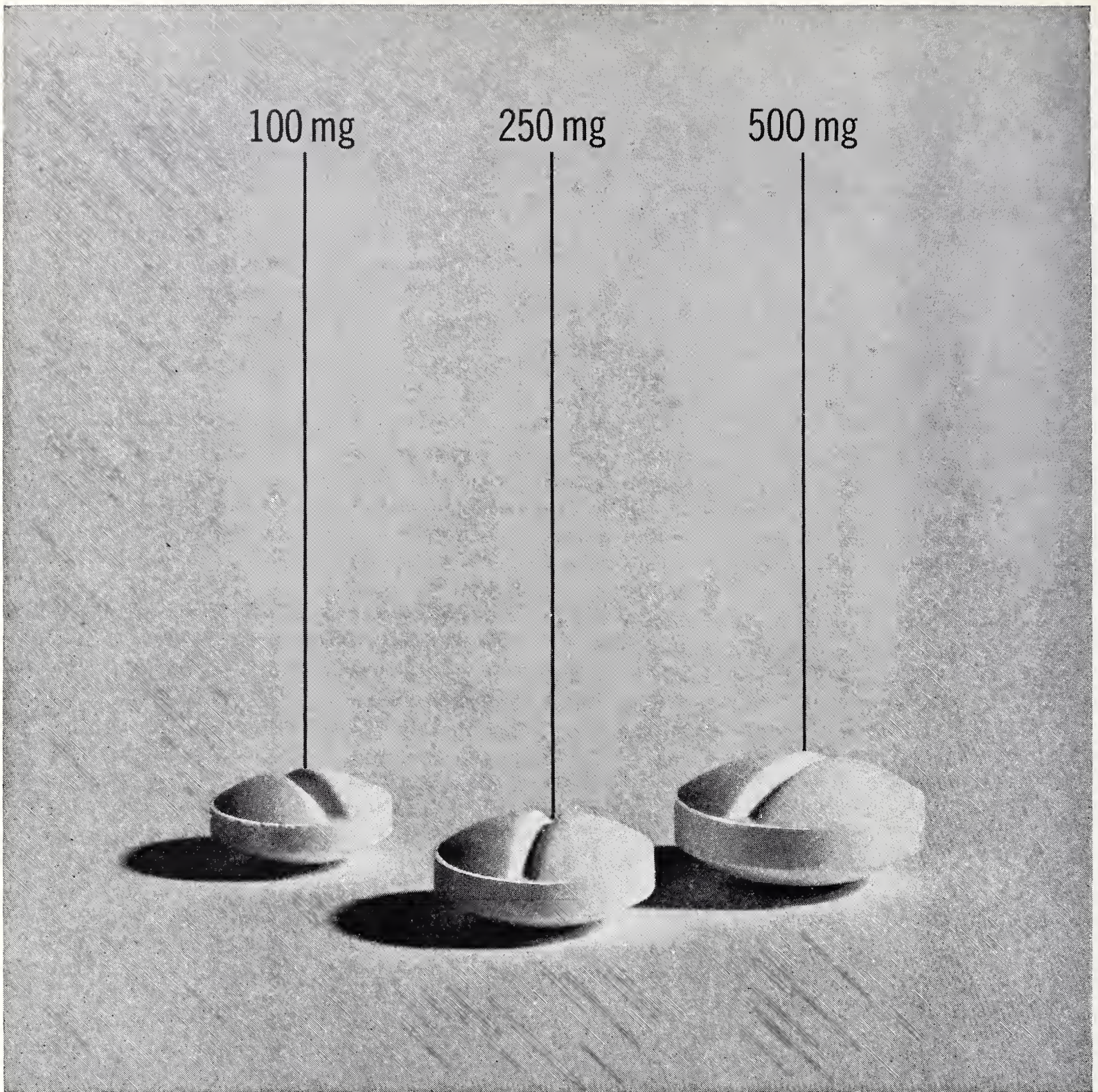
For information contact Division of Continuing Medical Education D23-3, University of Miami School of Medicine, P.O. Box 016960, Miami, FL 33101, Tel. (305) 547-6716.

NETWORK FOR CONTINUING MEDICAL EDUCATION

Schedule for Upcoming Programs

Oct. 30- Nov. 12 The Challenge of Adolescent Medicine: Six Patients—with Robert Masland, Jr., M.D., Harvard Medical School and Children's Hospital Medical Center, Boston; Norman Spack, M.D., Children's Hospital Medical Center; and Estherann Grace, M.D., Harvard Medical School and Children's Hospital Medical Center.

Nov. 13-26 Anemia: Signal of Disease—with Gerald Rothstein, M.D., University of Utah College of Medicine.



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Hazards Cited in Health Store Herbs

There are serious health hazards in the herbs and plants now offered in health food stores. Increasing numbers of persons are purchasing plant materials for use as foods from an expanding health food industry.

Unfortunately, the American public is unaware of the potential dangers of certain of these products; they assume and are accustomed to the fact that goods purchased from retail stores generally have been tested and approved for human use. However, many newly available plant products have not been tested; their effects on the body are not fully understood, or their effects simply are unknown to the majority of the casual purchasers."

Chamomile, a popular herbal tea made from flower heads, can cause a severe shock to the systems of persons allergic to ragweed pollen. Senna leaves and flower buds, another source of herbal tea, can cause severe diarrhea, and deaths have been reported from overdoses of senna preparations.

Product labels warning of hazards would help, but the Food and Drug Administration does not have the authority to require such labels except through cumbersome product-by-product procedure.

Physicians should be aware of the growing use of plants for food and self-medication, and should report to the Center of Disease Control, Atlanta, any illnesses which appear to be related to the herbs. A reporting system would enable the American public to be made aware of those herbs that are hazardous, and also would allow the many herbal preparations that are not potentially harmful to be sold "for the enjoyment of millions."

Most Doctors Don't Play Golf

Standup comics and other jokesters please note—Not many doctors play golf. An AMA poll of doctors' health and exercise habits revealed that only 10.7% of those responding play golf. The most popular sport among those who exercise regularly is jogging, followed by tennis and swimming.

Stress, overwork, and exposure to infectious disease are the three health hazards of medical practice mentioned most often by doctors polled. Stress triggers heart disease and high blood pressure. The latter is the health problem most often cited by respondents. Overwork brings physical and mental fatigue. Doctors are frequently exposed to such diseases as hepatitis and tuberculosis. And the daily demands of medical practice also can create depres-

sion or related mental problems, even occasionally pushing a doctor over the brink to suicide.

Doctors tend to follow their own advice to patients. Only 18.2% say they are now smoking. Ten years ago 30% of doctors smoked. And they hold down their weight. Only one fourth of physicians admit to being more than 10 pounds overweight.

But doctors aren't exercising as much as they recommend for others. Two out of five admit they do not exercise on a regular basis. Doctors prefer individual sports, such as jogging, because these can be done at odd hours, such as 6 AM or 10 PM, and do not depend on meeting the schedule of a partner or team.

Doctors also follow the adage that, "The physician who treats himself has a fool for a patient." Four out of five say they go to a colleague when they need medical attention.

AMA Supports Kennedy Health Promotion Bill

The AMA and Sen. Edward M. Kennedy (D-Mass.) found common ground today in their search for measures to prevent disease and promote health. The bill would encourage the continuation of the cooperative efforts of federal and state agencies in health education. Many of the greatest improvements in public health have come about through advancements in the methods of preventing disease,

JOIN US.



We can do much more together.

such as immunizations, improved sanitation and better nutrition, which have been achieved through a cooperative effort among federal, state and local governments, the medical profession and the public.

The bill under consideration is an effort to reinforce programs of disease prevention, health promotion and health education through cooperative federal and state activities. The role of the individual in preserving his own health is highlighted.

Specific proposals of the bill include a new program of federal grants to states to assist them in meeting the costs of planning and providing preventive health services. The state programs would be directed at reducing the leading causes within each state through systems of early detection.

In addition special project grants would be available to the states for the detection of hypertension, immunization of children, water fluoridation, prevention of illnesses caused by environmental factors, prevention of rodent-borne diseases, physician fitness activities and lead-based paint poisoning prevention.

The federal government would establish five centers for health promotion, which would provide technical assistance to the states in carrying out their programs for preventive health services.

The bill, in addition, would mandate ingredient and health and nutrition information on the labeling of all packaged foods although such information is of little value unless it is accompanied by consumer education in nutrition. The U.S. Department of Agriculture and the FDA are conducting public hearings to determine exactly what kind of nutritional information would be most beneficial to the consumer.

Basic to success (of the bill) is a major and continuing effort to educate the American people in healthful lifestyles and the importance of preventive medicine. Recommendation was for a long-term commitment.

Medical Science Redefines Thinking on What Is Normal

If everyone is abnormal, how do you decide who is normal? Doctors in the 1970s are having second thoughts about what is normal. As the science of genetics has progressed, medicine has learned that just about anyone may carry mutant genes. This doesn't mean he or she is sick, but that there are variations in the genes.

Testing for genetic traits now includes a total of nine categories of hereditary diseases, the best known of which is sickle cell anemia. Others include cystic fibrosis, hemophilia, Huntington's chorea, and muscular dystrophy.

In the case of mutant hemoglobin genes, there are many instances where the gene may be abnormal (a mutant) but no disease is produced. It is as difficult to convince some persons that they are healthy as it is to educate others concerning their

genetic disease, and this counseling problem will persist until there is a new understanding among physicians and the public that "normal" includes a great deal of diversity. This diversity will become more and more evident as new screening programs are implemented in the future.

Artificial Sweeteners Exonerated As Cause of Cancer in Humans

Artificial sweeteners in the amounts currently consumed do *not* cause cancer in humans, says a research report from Johns Hopkins University in the July 28 issue of *JAMA*. The researchers interviewed 519 individuals in Baltimore who had confirmed cases of bladder cancer, and an equal number of matching controls, and concluded that those who used artificial sweeteners, including diet soft drinks, were no more likely to develop bladder cancer than those who did not.

Neither saccharin nor cyclamate is likely to be carcinogenic in man, at least at the moderate dietary ingestion levels reported by the patient sample. One of the criticisms of the earlier animal studies had been that the rats were given huge doses of the sweeteners, much more than a human could possibly consume in diet soft drinks and from other such sources.

The study involved all Baltimore-area residents with bladder cancer in 19 participating hospitals between 1972 and 1975. Surviving patients who could be contacted for interviews were questioned carefully regarding their intake of table sweeteners, diet beverages, diet foods, and total intake in all forms. Patients and controls also were interviewed with respect to smoking habits, occupational history and other factors that might have been involved. Interviewers didn't know whether their subjects were former cancer patients or controls. Exposure to artificially sweetened beverages of all kinds was about the same in patients and in controls, of both sexes.

The apparent absence of an association between total artificial sweetener use and bladder cancer suggests that neither saccharin nor cyclamate in physiological dosages is carcinogenic in man.

Califano Owes Apology, FAH Says

Michael Bromberg the executive director of the Federation of American Hospitals, the investor-owned hospital industry, said HEW Secretary Joseph Califano owes an apology to hospital people and members of Congress for statements made on network television, which deliberately misled the public about House action on the hospital cost containment bill.

Califano cited figures on profits for the entire hospital industry and stated they were just for

investor-owned hospitals.

Bromberg said Secretary Califano impugned the integrity of some of the most outstanding Members of Congress by saying the House Commerce Committee sold out to lobbyists, refusing to admit that the Committee rejected the bill because it was a bad piece of legislation.

He told the Secretary in a letter that "voluntary efforts to contain cost increases are very encouraging and we want to work with you, but the desire must be mutual." FAH represents the investor-owner segment of the hospital industry. Its members include more than 1,000 hospitals and numerous hospital management companies.

The letter follows:

Dear Secretary Califano:

I have attempted to provide you with facts about the investor-owned hospital industry and the hospital management companies on many occasions during the past 18 months. Your continued refusal to meet with leaders of our industry and your constant use of erroneous and misleading statements about profits are frustrating to us but, more importantly, are damaging to the credibility of the administration and the development of its health policy.

On July 18, 1978, you made three statements which I consider irresponsible.

First, you said that the for-profit hospitals "lined their pockets" with "\$2 billion in profits." That is untrue. Investor-owned hospitals represent about 10% of all hospital revenues. The \$2 billion profit figure covers all hospitals, including the surplus of all non-profit hospitals. Based on \$55 billion in revenues, that is a profit margin of just over 3% for all hospitals. The investor-owned hospitals realized a net income of \$464 million. Second, you stated that the net income of investor-owned hospitals increased by 22%. That is misleading because you failed to mention that the profit margin did not increase, but remained at about 5% and 3.8% for the largest companies.

Third, you accused a congressional committee of "selling out to special interests." That is irresponsible and borders on slander of 22 Members of Congress.

I have written you in the past to correct these statements, but your rhetoric and politics of confrontation continue. Voluntary efforts to contain cost increases are very encouraging and we want to work with you, but the desire to cooperate has to be mutual.

Sincerely,
MICHAEL D. BROMBERG
Executive Director—FAH

MISSING

Don't be among the missing at the Tennessee Medical Association's 144th Annual Meeting—April 4-7, 1979, at the Airport Hilton Inn in Memphis. Last year's meeting was the largest ever, but the 1979 meeting is expected to be even better. Don't miss it . . . mark your calendar NOW!

PSYCHIATRIST NEEDED

Psychiatrist is urgently needed for senior staff position at the Community Mental Health Activity, Ft. Campbell Army Hospital, Clarksville, TN. GS-14/15 position; 8 to 40 hours per week. Day duties only. Contract negotiable. Excellent supplemental position or for retired or semi-retired practitioner. Must be Tennessee or Kentucky licensed. Contact C. A. Caldwell, CMHA, (502) 798-2316/3827.

OPHTHALMOLOGY PRACTICE FOR SALE

General ophthalmology practice with an active surgical practice available immediately. Located in Oak Ridge, an East Tennessee city near Knoxville, with 32,000 population and a drawing area of 120,000. Equipment to be sold with practice. Phone (615) 483-3591 or (615) 483-7395.

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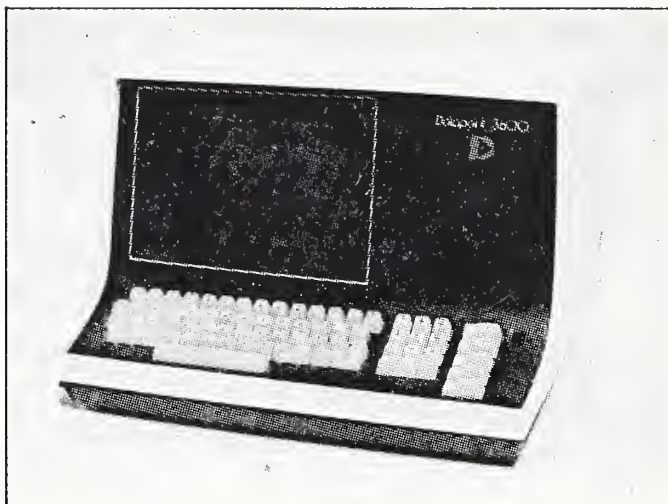
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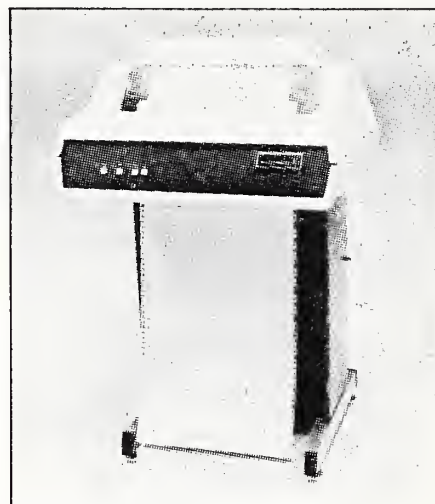
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This Dermatologic Issue

Guest Editorial

REX A. AMONETTE, M.D.

Today our knowledge of the function of the skin and its components is vast. We are beginning to discover some of the factors that regulate the growth and differentiation of the epidermis; during the past decade, enormous progress has been made in our understanding of immunologic processes; the biochemical complexities of melanin have been clarified; we understand how the glands function and are controlled; and the biosynthesis of collagen and other connective tissue components has been extensively studied.

This dynamic time in American dermatology and the accelerated rate of development of the functional era in dermatology are due to an unparalleled surge of interest in cutaneous physiology, biochemistry, immunology and dermatopathology. In Tennessee, our departments of dermatology have been leaders in developing this interest. With the aid of our practicing clinicians, they are successfully fulfilling the important responsibilities of teaching medical students, interns, residents and fellows, and of the continuing education of dermatologic and nondermatologic physicians.

This interest in basic research and continuing medical education has not resulted in the neglect of morphologic observation and clinical study. Indeed, because of the accessibility of the skin,

one of the characteristics of study in dermatology has been the successful correlation of structure and function, perhaps more so than in any other specialty.

The tremendous scope of dermatology becomes apparent when one faces the complexity and multiple functions of the skin and its appendages. A primary care physician in Tennessee may see 10% to 15% cutaneous problems in his practice. Potential irritants, allergens, benign and malignant growths, pruritis, cosmetic implications, drug reactions, systemic disorders, and blistering diseases can make diagnosis and therapy confusing and difficult.

In 1977, the membership of the Tennessee Dermatological Society agreed to submit a number of articles to the *Journal of the Tennessee Medical Association* in hopes of presenting new and useful information for clinical practitioners. This issue presents practical approaches to the patient with dermatitis or blistering disease; update of therapy for psoriasis and warts; help in selecting effective sunscreens; and an article to free us from false notions concerning dermatology. In future issues we hope to present articles concerning dermatopathology and cutaneous surgery.

I wish to thank each contributor for his excellent manuscript and the Editor of TMA JOURNAL, Dr. John Thomison, for his invaluable help.

Dr. Amonette is president, Tennessee Dermatological Society.

Our Misunderstood Skin

FRANK G. WITHERSPOON, M.D.

No organ system of our body is less understood and more universally self-treated than the skin. Literally everyone is a self-appointed expert in the diagnosis and treatment of skin disorders. We receive well-meaning assistance from one and all, from the grocery clerk to the neighborhood pharmacist. The neighbor next door hastens to tell us that her great-aunt had the "same thing you have." The suggested treatments may range from the bizarre to the actually dangerous. Much of the difficulty stems from one fact: we can't actually see our internal organs, but our skin is easily visible and ready to be diagnosed and treated by anyone to whom we'll listen. The aim of this paper will be to point out some of the misconceptions and commonly believed fallacies about our skin. Dermatologists hear several of these following beliefs every day, and I shall list and briefly discuss a few of them:

Fallacy Number 1: *"Better not use someone else's comb, or you might catch dandruff."* Aside from the aesthetic objection to another's comb there is no way that dandruff, or seborrheic dermatitis, can be contracted by the use of another person's comb or brush. The condition is caused by overactive sebaceous glands, and the seemingly dry, scaly "dandruff" flakes are largely dried oil, plus dust and cellular debris. Despite the barber's and the beautician's insistence on hot oil shampoos for "dry scalp," the use of oily materials will aggravate rather than help matters. There is no cure for seborrheic dermatitis, though it can be controlled very well in most instances.

Fallacy Number 2: *"There is no use in treating acne; teen-age pimples will go away in time."* We must remember that the adolescent boy or girl is very sensitive to peer approval and tends to magnify imperfection. Feeling socially handicapped by acne can leave psychological scars just as serious as physical scarring. It is very important to treat acne, and the parent who refuses to recognize this is doing a great disservice to the adolescent. The doctor who doesn't respond to a cry for help from a teen-ager is derelict in his

duty, as so much can be done to aid these youngsters!

Fallacy Number 3: *"Women and girls should always use creams to cleanse their faces—never soap and water!"* I have heard this in many variations from numerous patients and cosmetic salesladies. Only a small minority of adolescent girls would be able to do this without encountering difficulties. Many young women with little or no complexion problems suddenly fall into the "oily cosmetic trap." The first fine lines, both physiological and inevitable, have begun to appear. A saleslady is able to sell a complete collection of cosmetics to a fearful young lady. Many of these may be very harmful to a basically seborrheic skin. How much better it would have been if the girl had used soap and water, rather than adding oil to an already oily skin!

Fallacy Number 4: *"If I have a rash I must be dirty, therefore I'll bathe more often with soap and plenty of hot water."* Many people follow this line of reasoning, but in middle-aged and elderly persons the results may be very discouraging. There simply is progressively less oil being secreted by our sebaceous glands as the years pass by. Much dermatitis, with associated pruritus, is caused by overbathing, especially in colder weather. Detergent bars for bathing are favorites of the housewife, as no "ring" is left in the bathtub. These bars tend to be drying to children's skin, and frequently cause severe discomfort in the elderly. "Bubble-baths" have dropped greatly in popularity because of their drying effect on the skin. Dramatic results are often forthcoming when frequency of bathing is reduced. The use of a good bath oil (and I don't mean a few drops of baby oil or perfumed bath oil) will provide a much more comfortable bath. An oily lotion at bedtime will help a great deal also.

Fallacy Number 5: *"That rash all over your body must be shingles."* I find a nearly universal confusion among the laity about what constitutes herpes zoster ("shingles"). Most people seem to think one must be "nervous" to contract this painful virus disease. Actually this is an acute inflammatory process of only one nerve and its cutaneous endings, but is construed by many laymen as being caused by nervousness. Another

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mistaken belief is that if shingles goes completely around the body it will actually kill the patient! The dermatologist sees cases of everything from urticaria to poison ivy rash which have been diagnosed as shingles.

Fallacy Number 6: *"Any rash with round or oval patches is probably ringworm."* Actually, in most instances when the patient is convinced of a "ringworm" diagnosis, it is found to be anything from a contact allergy to the frequently seen pityriasis rosea. It might be an aging, overly dry skin, but the appearance of circinate or oval lesions doesn't necessarily denote a fungus infection.

Fallacy Number 7: *"Warts are caused by handling toads."* No doubt the warty epidermis of the frog or toad is the cause of this frequently believed myth. Of course there is no valid reason for this belief. Warts are an infection caused by contact with a specific virus. We frequently treat three or four family members for warts at the same time, attesting to the ease of its propagation. It is a mistake to ignore warts for several reasons. They are certainly unsightly and at times quite disfiguring, and plantar warts can be rather crippling. These growths are often contracted by friends and siblings, another reason for removal.

Fallacy Number 8: *"A bad rash needs strong medicine."* This is one of the most frequent errors in self-medication. Overtreatment has already taken place in a large percentage of patients coming to the dermatologist. A number of the more popular preparations for local medication contain potent sensitizers, such as benzocaine. It is a rare new patient who hasn't already used a number of over-the-counter cure-alls. Often a chain of drying agents has been applied to an already overly dry skin. The patient has scrubbed with soap, has used alcohol and then calamine lotion, adding constantly to his discomfort. I feel it is much better to err on the undertreatment side.

Fallacy Number 9: *"Never have a mole removed, because that will cause cancer."* I know of no way to prove that a dermatologic growth is benign or malignant except by biopsy, which can be made of any pigmented nevus or other suspicious growth without jeopardizing the patient. Then the course of treatment to be followed can be determined. It would be ridiculous to perform a wide and deep surgical removal of every "mole" one sees. Actually malignant melanomas are rather rare, and when diagnosed by biopsy,

may be surgically excised as radically as necessary.

Fallacy Number 10: *"This growth couldn't be skin cancer because it doesn't hurt; I'll just watch it and see what happens."* Skin malignancies are usually painless. As any growth that occasionally bleeds and crusts over, gradually enlarging, is suspect, it is very unwise to ignore such a growth. Most skin malignancies do not metastasize. Basal cell carcinomas can be very disfiguring however, and all of us have seen very mutilated faces from these growths. Every physician should habitually observe the visible areas of the face, neck, and dorsa of the hands of his patients. Individuals with blond or red hair have a much greater chance of developing skin malignancies than those with darker hair, and those whose epidermis is protected by more melanin. Very frequently the family physician discovers a potentially serious lesion by observation, and prompt attention can pay big dividends. For most "skin cancers" surgical or radiological destruction will give equally excellent results.

Fallacy Number 11: *"I break out because my blood is too acid."* The belief that the eating of tomatoes and citrus fruit can make the blood "acid" is very widespread. Of course the pH of blood is so closely buffered that the range is only between 7.38 and 7.42, therefore it is on the slightly alkaline side. There is no way that so-called acid foods can alter this metabolic fact.

Fallacy Number 12: *"Wash your hands in gasoline to get the grease off."* This policy, with its several variations, may cause a great deal of dermatitis. The mechanic who washes his greasy hands with gasoline removes the protective oil from his skin at the same time. The painter who washes frequently with paint thinner or turpentine and the careless handler of dry-cleaning fluids are both in the same category. Organic solvents cause defatting of the skin when used frequently, with a consequent eczema. The housewife falls into the same category, as household detergents are notoriously drying to the skin. I feel that cloth-lined neoprene or rubber gloves are the best investment that can be made for the housewife's hands.

Fallacy Number 13: *"Just use my cortisone ointment; it'll cure nearly anything."* It is human nature to seek a "cure-all." When I was in medical school the sulfonamide ointments were applied to almost anything that was wrong with the skin. This was followed by penicillin ointment, which was used for years until we discovered

MISUNDERSTOOD SKIN/Witherspoon

its sensitizing potential. Later neomycin ointment was frequently used and antihistamines were often applied locally. Of recent years locally applied corticosteroids have assumed the mantle of the "all-curing ointment." We are learning with experience that more difficulties are caused by locally applied steroids than had been previously known. Most of the more potent preparations are fluorinated, and many cases of a perioral dermatitis are directly attributable to this fact. When the less potent but safer preparations, without fluorine, are prescribed the rash will disappear. I fear that steroids are sometimes prescribed without any attempt at diagnosis, resulting in exacerbation of a bacterial or virus

disease. We must use valid reasoning in prescribing these drugs!

Fallacy Number 14: *"I can walk in the woods and never touch poison ivy and still develop a rash."* If brush is being burned, with some poison ivy vines included, the oily droplets in the smoke will cause a rash in a susceptible individual. Otherwise one cannot contract a poison ivy dermatitis "from the air." The oily resin must get on the cutaneous surface for the rash to appear.

There are many more fallacious beliefs about the largest organ of our body, the skin. I have attempted to point out some of the more common misconceptions, which are especially widespread.

Always remember that when our skin is misunderstood and mistreated, it "weeps"!



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29	30	NOTES				

The Diagnosis and Treatment Of Dermatitis

KENNETH R. KULP, M.D. and ROBERT J. KAPLAN, M.D.

Introduction

Diseases classified in the category "dermatitis" or "eczema" are among the most common of skin problems, but knowledge of their etiology or pathogenesis is often minimal. The word "eczema" is derived from the Greek word meaning "to bubble out or erupt," and therefore originally referred to an acute exudative process. However, "eczema" has come to be used synonymously with many different types of acute and chronic dermatitis, and thus will be considered synonymous with "dermatitis." The changes which occur in the skin in acute or chronic dermatitis generally follow a basic pattern, regardless of different causative factors. Also, some factors can become involved secondarily and alter or mask the original process. Generally, however, in acute dermatitis the following sequence of events occurs: erythema, edema, vesiculation, weeping, crusting, and excoriation. If the process progresses to a chronic dermatitis the following changes are usually seen: hyperpigmentation, epidermal thickening (lichenification), scaling, and excoriation. Subacute dermatitis can show transitional changes. As a rule, acute and chronic dermatitis of various types cannot be differentiated by histopathology. Some types of dermatitis can be classified according to their etiology, but others are defined simply in terms of clinical morphology. There is no generally accepted classification of the eczemas but the following types will be discussed: contact dermatitis, atopic dermatitis, seborrheic dermatitis, nummular eczema, lichen simplex chronicus, stasis dermatitis, infectious dermatitis, hand and foot dermatitis, infantile dermatitis, xerotic eczema, perioral dermatitis, and exfoliative dermatitis.

Autoeczematization (autosensitization) or "id" reaction refers to the development of eczematous or vesicular lesions distant from an existing inflammatory, eczematous condition. Common examples are generalized reactions that may develop

from stasis dermatitis, or vesicular lesions that may develop on the hands or in a generalized distribution during an inflammatory fungal infection of the feet. These reactions are most likely hypersensitivity phenomena, but whether the immune reaction is to the skin itself, to bacterial products on the skin, to medications used in therapy, or to other factors is not known.¹

A major decision in treating patients with dermatitis is whether the condition is due to external factors or endogenous causes. Clinical signs suggesting external causation include eczematous changes, regular or irregular shaped lesions, involvement of areas with more "sensitive" skin, and especially, distribution and pattern of lesions corresponding to areas of contact with the causative agent. Signs suggesting endogenous cause of an eruption include more erythema than eczema, more regular or rounded lesions, distribution of lesions unrelated to "sensitivity" of skin or exposure to known agents.² However, one factor may become superimposed on another and obscure the initial process. For example, an allergic contact dermatitis to an ingredient in a prescribed topical corticosteroid cream may mask an underlying primary irritant hand dermatitis.

Therapeutic Principles

Therapy of most types of acute and chronic dermatitis is similar due to their common inflammatory nature. Exceptions will be noted in discussion of specific entities. The following principles apply to acute and chronic eczema: (1) Use topical medications with the least potent sensitizing chemicals and the least number of sensitizing chemicals. (2) Patch test patients who fail to respond to usual therapy, or who experience exacerbation with therapy. This is to rule out unrecognized initial allergic contact dermatitis or superimposed sensitization to topical medications. (3) Treat secondary bacterial infection with systemic, not topical, antibiotics.

The most prevalent potential pathogenic organisms in secondarily infected dermatitis are, in decreasing incidence, *Staphylococcus aureus*, beta-hemolytic streptococci, and Gram-negative bacteria. Some toe web infections are caused

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DERMATITIS/Kulp

primarily by Gram-negative bacilli and thus are an exception.³ Erythromycin (250 mg qid) is often mentioned as the systemic antibiotic of choice for secondarily infected dermatitis. Eaglstein et al,⁴ however, recently reported increased healing in patients with secondarily infected dermatitis treated with systemic cloxacillin as compared to placebo. This report was notable for the following reasons: (1) Their clinical impression that systemic antibiotic therapy was useful in "impetiginized" or secondarily infected dermatitis. (2) The skin lesions were described as weeping, with serous crusts, but no gross pus or cellulitis was present. Thus systemic antibiotic therapy may be beneficial even in the absence of definite signs of cutaneous infection. (3) Cloxacillin is their standard systemic antibiotic for secondarily infected dermatitis.

Topical corticosteroids are the drugs of choice in most types of acute and chronic dermatitis. They possess anti-inflammatory, antipruritic, and vasoconstrictive properties. Many are available in lotion, cream, ointment, and gel vehicles.

Hydrocortisone is nonfluorinated and of low potency. Desonide (Tridesilon) is a medium-strength nonfluorinated corticosteroid. The numerous fluorinated topical corticosteroids vary from low to extremely high potency. Occlusive therapy using vinyl film (Saran wrap), vinyl gloves, or body suits over steroid creams or ointments can increase percutaneous penetration up to 100 times that reached without occlusion. Such a method can render a weak agent as potent as the strongest ones used without occlusion. Occlusion should not be used on oozing or infected lesions and should be limited to eight hours per day to decrease the incidence of folliculitis. The use of a corticosteroid-impregnated polyethylene adhesive tape (Cordran tape) provides a similar increased penetration. Occlusive therapy is particularly useful in areas where penetration is poor such as the palms and soles. The most potent means of delivering corticosteroids to skin lesions is by intralesional injection of corticosteroid suspensions (Kenalog, Aristocort). This is usually reserved for resistant plaque or nodular lesions, using a concentration of 2 to 10 mg/cc.

Side effects from topical corticosteroids generally occur in direct proportion to their potency. Local side effects include atrophy, telangiectasia, striae, and a possible causative role in perioral dermatitis and rosacea-like dermatitis.^{5,6} Recent

reports⁷ of ocular hypertension, glaucoma, and cataracts from ocular application of corticosteroid ointments and drops indicate the danger of careless or prolonged use of these agents on the eyelids. Suppression of adrenal function by topical corticosteroids is well documented, usually with widespread application on inflamed skin with a defective barrier. A recent study⁸ using a potent corticosteroid cream demonstrated a marked decrease in plasma cortisol with or without occlusive therapy in patients with extensive psoriasis, and only with occlusion in normal subjects. Fifteen grams of cream was applied to approximately 50% of the body twice daily. Glycosuria has also been reported induced by topical corticosteroids.⁹

In acute dermatitis or thick lesions (plaques, nodules) of chronic dermatitis, a potent fluorinated corticosteroid is probably used initially by most dermatologists. When the acute inflammation is under control, or the thick chronic lesions become less infiltrated, a less potent agent may be substituted if further corticosteroid is needed. Because of the above-mentioned side effects, some dermatologists use only hydrocortisone preparations on the face, but many others will use potent fluorinated corticosteroids for one to two weeks on the face. Initial use of hydrocortisone or substituting hydrocortisone after use of potent fluorinated preparations may decrease exacerbations when terminating therapy. Dobson¹⁰ recommends use of 1% hydrocortisone in infants and children with extensive involvement but notes more potent agents may be used on localized areas, even for prolonged periods. In adults he states "there seems to be little risk even in the widespread use of these (more potent) preparations for chronic conditions." Generally the least potent agent that will produce the desired results should be used.

Systemic corticosteroids should be used only as a last resort. They may be indicated in severe or widespread acute dermatitis or to control a severe exacerbation of a chronic dermatitis. Patients presenting with severe poison ivy dermatitis are often treated with a short course of prednisone. Systemic corticosteroids are generally contraindicated in chronic eczema and should not be used as a substitute for further diagnostic evaluation. When they are indicated, prednisone in a single morning dose of 40 to 60 mg is usually used initially. Therapy is given in a tapering dosage and should last no more than 10 to 14 days. Arnold¹¹ draws the following conclusions

regarding systemic corticosteroid therapy of skin disorders with intramuscular triamcinolone: (1) The total intramuscular dose is only a fraction of the oral steroid (prednisone) dose required. (2) A rest period between relapse and re-treatment . . . permits adrenocortical recovery. (3) The physician controls the dose himself. (4) Remission can be recognized (because patients are not on a continuous dosage). (5) The tapering-off "withdrawal" problem is completely eliminated.

Acute weeping dermatitis is best treated initially with wet dressings (compresses) of tap water, or aluminum acetate (Burow's solution 1:40), which is drying and mildly antiseptic. Compresses using 1% acetic acid solution have been shown very effective in reducing or eliminating *Pseudomonas aeruginosa* in skin lesions.¹² Corticosteroid creams or lotions are often used on weeping lesions (if concomitant systemic antibiotic therapy is employed) to reduce inflammation and thereby restore the physiologic barriers of more nearly normal skin. An ointment base may be preferred for dry lesions although some patients strongly object to "greasy" ointments. Hydroxyzine hydrochloride (Atarax) has been shown efficacious in relieving itching (pruritus) in skin disease.¹³ The usual dosage is 25 to 50 mg tid to qid, prn. Aspirin is mentioned as one of the most effective antipruritic agents, although used infrequently for this purpose.¹⁰

When dealing with chronic dermatitis, the key to success is identification of the causative factors. Until these are discovered, it may be impossible to do more than partially control the problem.

Contact Dermatitis

In order to adequately treat contact dermatitis, Fisher's textbook *Contact Dermatitis*¹⁴ is essential to have at hand. Contact dermatitis can be caused by chemical allergens, toxins, and chemical or mechanical irritants. Contact dermatitis is classically divided into two types: the more common irritant contact dermatitis, and allergic contact dermatitis. Photocontact dermatitis will also be discussed.

Irritant contact dermatitis is produced by a nonimmunologic mechanism and requires no prior exposure to elicit the reaction. Chronic exposure to solvents, detergents, and cleansers is the most frequent cause. Factors such as skin sensitivity must play a role because not everyone exposed to the same agents develops irritant dermatitis. Strong irritants such as acids or alkalis produce dermatitis after a single exposure. Most irritants fall into the weaker irritant category, and

repeated exposure is required to produce a dermatitis. An example of mechanical irritation is dermatitis due to fiberglass particles. Also, repeated exposure to water or sweat can alter the barrier function of skin, rendering it more susceptible to irritants or sensitizers. Repeated exposure to water, solvents, detergents, and soaps removes the skin's surface lipid layer, leading to increased evaporative loss of water, dehydration of epidermal cells, fissuring, and chapping of skin. The housewife is a common victim of this form of dermatitis, due to frequent exposure to defatting or irritating agents, as well as to bleaches, oven cleaners, fruit and vegetable juices, polishes, and diaper rinses. The worker in industry is also frequently exposed to solvents, oils, greases, acids, or alkalis. It should be emphasized that irritated or eczematous skin is more susceptible to sensitization reactions.

Allergic contact dermatitis (ACD) is most often seen as acute or subacute dermatitis. It is a form of delayed hypersensitivity reaction. In this process, the sensitizing chemical (haptene) becomes an antigen after combining with epidermal protein and being processed by the cellular immune system. Whenever this sensitizing chemical subsequently comes in contact with the skin, an immunologically mediated inflammatory reaction occurs. Cross-reactions can occur among substances of similar chemical structure. After the sensitizing exposure, an incubation period of 7 to 10 days is required before a reaction is seen, but usually on subsequent exposure only a few hours elapse before noticeable changes occur. Schorr¹⁵ mentions the concept of sensitization index of chemicals reflecting their ability to produce allergy in any given population. One chemical may have the capacity to sensitize 5% to 10% of the population, while another may sensitize only 0.01% of a given population. This should be considered when evaluating patients with ACD as well as when prescribing topical medications. Exposure to potent sensitizers like dinitrochlorobenzene (DNCB) can produce contact dermatitis in most persons in a few weeks, but weak allergens like ragweed oleoresin may require many years of exposure and sensitize only a few people.

The antigen of poison ivy, oak, or sumac is one of the most likely to incite a vesicular or even bullous allergic dermatitis. The most characteristic lesions of poison ivy dermatitis are linear papulovesicular streaks where the leaf brushes the skin. Clothing dyes are becoming a less common cause of ACD, but formalin and

chemicals used in permanent press processing are increasing as causative factors. In shoes, the most common sensitizing agents are glues or rubber products, and chromates used in tanning of the leather. Most ACD related to jewelry is due to nickel; earlobe dermatitis secondary to pierced earrings is a prime example. Small amounts of nickel in expensive gold jewelry can be leached out under conditions of heat and sweating, and thus cause dermatitis. A method of detecting occult sources of nickel by rubbing a cotton-tipped applicator containing two readily available reagents has recently been described.¹⁶

In a recent study of 1,200 patients with ACD in the United States and Canada¹⁷ the following substances were the most commonly incriminated: nickel sulfate (jewelry, clips on underclothing, etc.); potassium dichromate (leather products, etc.); paraphenylenediamine (hair dyes, etc.); ethylenediamine HCl (Mycolog cream, etc.); neomycin (many topical medications); lanolin (cosmetics and topical medications); and ammoniated mercury (industry, cosmetics). An increasingly common problem is the development of ACD to chemicals in topical medications (OTC or prescribed) used to treat dermatitis or other skin problems. This ACD may aggravate the primary process or even become the primary problem. Multiple reports have documented ACD to ingredients of topical corticosteroids including chemicals used as preservatives or vehicles and to the active corticosteroid chemicals themselves. Probably the most common sensitizing ingredient of steroid creams is ethylenediamine HCl, a preservative found in Mycolog cream.¹⁸ Other common sensitizers in topical medications include thimerosal (Merthiolate), benzocaine, nitrofurazone (Furacin), and paraben preservatives.

Photocontact dermatitis may occur by phototoxic or photoallergic¹⁹ mechanisms. It presents initially and most severely on sun-exposed skin of the head, neck, hands, and forearms. Photosensitizing compounds can reach the skin from endogenous production (porphyria) or ingestion (hydrochlorothiazide) or by topical application (furocoumarins or psoralens in some perfumes). This must be distinguished from ordinary contact dermatitis or pure photosensitivity by photo tests and photo patch tests.^{20,21} The incidence of photocontact dermatitis due to salicylanilides in deodorant soaps is decreasing markedly in the last

five years, due most likely to removal of the more potent photosensitizers.²² Recently reported examples of ACD complicating topical therapy include reactions to 5-fluorouracil used for treating actinic keratoses²³ and to multiple sunscreen agents used in the management of photosensitivity dermatoses.^{24,25} A recently reported case²⁶ illustrates the potential for systemic medication to induce a severe dermatitis in a patient previously sensitized to a topical medication. A generalized exfoliative dermatitis developed in an asthmatic patient allergic to ethylenediamine HCl, a preservative in aminophylline suppositories and Mycolog cream. Noteworthy is the fact that the patient had a negative patch test to Mycolog cream itself, but a strongly positive one to ethylenediamine HCl 1% in petrolatum. This demonstrates the need to perform patch tests using standard concentrations of chemicals and also to test individual ingredients in suspected topical medications.

Evaluation of contact dermatitis requires obtaining a history of exposures at work and at home. Cosmetics regularly used and topical medications already applied must be suspected. Reference to a textbook on occupational contact dermatitis may be helpful.²⁷ Patch testing may be done with selected chemicals to confirm a suspected allergen, or by using a "scout tray" of common sensitizers, if no specific agent is suspected. At times it may be decided to simply treat the existing dermatitis and pursue further evaluation with patch testing only if the problem persists or recurs.

Management involves identification and removal (if possible) of the causative factor(s), systemic antibiotics if secondarily infected, and topical steroids. Systemic steroids are often very helpful in controlling a severe or widespread acute contact dermatitis. The cornerstone of therapy is to eliminate the cause of chronic contact dermatitis. Hyposensitization is occasionally effective, but results are usually not permanent and there may be uncomfortable side effects.

Atopic Dermatitis

Atopic dermatitis (AD) is a common entity to which certain individuals have a hereditary predisposition. About 70% of patients have a family history of AD, hay fever, or asthma. Although the etiology is unknown, recent investigations are focused mainly on the many physiologic and immunologic alterations usually found in such patients. In this disease the most characteristic symptom is itching (pruritus). The resultant

chronic scratching leads to the characteristic dermatitis and lichenification. In a recent review article on AD, Hanifin and Lobitz²⁸ state the "diagnosis may depend on a combination of morphologic, distributional, and historical features," and they suggest diagnostic criteria for this disease.

Clinically, AD usually begins in infancy or early childhood, often around 3 months of age. At this time it usually takes the form of erythematous, dry or oozing patches or plaques on the face and extensor surfaces. At the age of 2 to 3 years the dermatitis may markedly decrease in severity or disappear. However, it often recurs in late childhood, adolescence, or early adult life, usually in the form of dry excoriations and lichenification localized in flexural areas such as the neck and antecubital and popliteal fossae. In these early stages, clinical diagnosis is usually easy. When patients reach about 20 years of age, the disease may abate or become localized as a subtle hand or foot eczema. In others it may be chronic and widespread into the fifth decade.

The skin of most patients with AD is extremely dry. A recent study²⁹ indicates the extremely high carriage rate (93% in skin lesions) of *S. aureus* in patients with AD and the obvious public health hazards of harboring such potential pathogens. Due to abnormal vasomotor reactivity these patients are often very intolerant of sudden changes in temperature or humidity. Some signs of abnormal cutaneous vasomotor reactivity include decreased digital skin temperature, white dermographism, delayed blanch responses to cholinergic agents, and increased sensitivity to histamine. Szentivanyi³⁰ proposed the beta-adrenergic theory of atopic disease, suggesting a blockage of beta-adrenergic receptors in the tissues of patients with atopic disease. There are abnormalities of humoral and cellular immune systems in atopic dermatitis, but the skin lesions cannot be classified under either of these mechanisms.

Despite the increased incidence of immediate wheal (type I) reactions to common environmental allergens by scratch testing, many feel that "allergic" management with hyposensitization and dietary eliminations is generally not helpful in therapy.^{31,32} Although serum IgE is often elevated in AD "the role of IgE in the pathogenesis of AD remains unclear . . . as a practical test, serum IgE offers little aid to either diagnosis or prognosis."²⁸ Dysfunction in cell-mediated immunity is postulated because of the susceptibility

of these patients to particularly severe infections, such as disseminated vaccinia (eczema vaccinatum) and herpes simplex (eczema herpeticum). For this reason patients with AD should not be vaccinated for smallpox, and should be segregated from persons with active vaccination or herpes simplex lesions. The bulk of evidence suggests that patients with AD are no more likely to develop allergic contact dermatitis than normal individuals.³³

Recent evidence raises the possibility of a factor in the serum of patients with AD which can depress in-vitro leukocyte function and inhibit epidermal cell cyclic AMP.²⁸ Therapy aimed at increasing cellular levels of cAMP has been tried using topical caffeine.^{34,35} The rationale for this therapy is that increased levels of cAMP decrease histamine release locally and ameliorate inflammatory processes. Caffeine, a methylxanthine, inhibits phosphodiesterase (the enzyme which degrades cAMP to 5-AMP) and presumably raises local levels of cAMP. Topical caffeine in 0.5% hydrocortisone proved better than 0.5% hydrocortisone alone in three of seven evaluation scales in a recent study.³⁶

Therapy of AD must be undertaken, with the patient and family understanding the goal is control, not cure. It should be directed at relieving the main symptom (pruritus), reducing exacerbating influences, and reducing inflammation. There is lack of significant benefit from hyposensitization and dietary manipulation. Acute exudative dermatitis may be treated with wet compresses, and systemic antibiotics if infected, but the mainstay of therapy is a corticosteroid cream or ointment. Short-term systemic corticosteroid therapy may be necessary to control severe or widespread cases. Maintenance therapy should include topical corticosteroids as needed, use of the least-sensitizing lubricant creams, ointments, or oils, environmental manipulation, and avoidance of irritating clothing materials like wool, nylon, etc. Temporary use of oral antipruritic agents, tranquilizers, or antidepressant medications may be indicated. Emotional support of patients and parents is also very important. Many parents are pleased to learn that their often hyperactive "atopic" child will probably be an "achiever" in life.

Seborrheic Dermatitis

Seborrheic dermatitis (SD) is generally regarded as an advanced or inflammatory stage of ordinary dandruff. It characteristically occurs in areas of skin rich in sebaceous glands: scalp,

eyebrows, nasolabial folds, chin and retroauricular region. In more extensive cases, it may involve the presternal region, interscapular area, axillae, and intertriginous folds. Lesions on the trunk may be mistaken for superficial fungal infections. The scaling patches may have a mildly or markedly erythematous base. The scaling is frequently oily and slightly yellow.

Ordinary dandruff is regarded as an inherited intensification of the physiological process of desquamation. Likewise, SD is regarded generally as a constitutional diathesis which can be controlled, but not cured. The undisputed effectiveness of selenium sulfide shampoos (Selsun, Exsel) and topical corticosteroids may be related to their cytostatic effect in decreasing epidermal cell turnover.³⁷ Recent studies^{37,38} suggest no role for microorganisms in the pathogenesis of dandruff, but cannot rule out at least a partial role for infection with the yeast, *Pityrosporum ovale*, in the pathogenesis of seborrheic dermatitis.

Initial treatment of the scalp includes daily or every other day use of a selenium sulfide or tar shampoo in conjunction with a corticosteroid lotion bid or tid. Betametasone valerate (Valisone) or betamethasone dipropionate (Diprosone) lotions are very effective and have a predominantly alcohol vehicle which renders them less greasy. A cream vehicle for the corticosteroid is often preferred on the face or trunk. Removal of moderately thick scalp scaling is facilitated by nocturnal application of Baker's P and S liquid. Resistant scalp involvement may respond to nocturnal application of an ointment containing 3% to 5% sulfur and 3% to 5% salicylic acid in carbowax base, followed by shampooing the next morning. Maintenance shampooing with selenium sulfide, tar, or pyrithione zinc (Head and Shoulders, Danex, Zincon) products about twice weekly is recommended. Short-term systemic corticosteroid therapy is rarely needed in extremely severe disseminated cases.

Nummular Eczema

The cause of nummular eczema is unknown. This entity is distinctive for its characteristic nummular (round or coin-like) lesions. These pruritic patches vary from one to several centimeters in diameter and frequently show oozing, crusting, and scaling at their onset. Occasionally only a few patches are seen. Usually numerous lesions are present and occur in a characteristic distribution on the extensor surfaces of the ex-

trémities (especially the arms), posterior aspect of the trunk, buttocks, and lower legs. In some instances an extensive shower of lesions appears suddenly, often in the presence of an existing stasis dermatitis, contact dermatitis, or excoriated lesions from insect bites. It is not known whether this represents an autosensitization or some other type of allergic reaction to the dermatitis itself, to secondary bacterial infection, to irritating or sensitizing topical medication, or to ingestion of a drug.

Many patients with NE have dry skin (xerosis). Also, a history of atopic dermatitis is present in some cases. A theoretical sequence of events of pathogenesis is as follows: localized xerosis, minimal trauma, low-grade bacterial infection, possible sensitization to the bacteria or to toxins combined with skin proteins.^{39,40}

NE generally responds somewhat to treatment, but is hard to cure. Eventual involution may involve months to years. Topical corticosteroids are the mainstay of therapy. If exudative lesions are present, wet compresses may be desired in addition to a corticosteroid lotion or cream. Systemic antibiotic therapy should be tried for 10 to 14 days and possibly continued for several weeks. If the lesions are dry and not infected, a corticosteroid ointment may be preferred. Short courses of systemic steroids are sometimes rapidly effective in widespread cases but are often not necessary. Some alternative treatments include 2% to 5% coal tar in cream or ointment base, Vioform cream, coal tar and short wave ultraviolet light therapy (Goeckerman), or grenz ray exposure. Maintenance therapy should include topical corticosteroids as needed, prevention of xerosis by restricting bathing frequency, use of bath oils or emollient creams, and decreasing exposure to primary skin irritants.

Lichen Simplex Chronicus

Lichen simplex chronicus (LSC) or "circumscribed neurodermatitis," is generally considered a characteristic syndrome unrelated to atopic dermatitis. Although the etiology is unknown, it is the result of an itch-scratch cycle in susceptible persons. LSC may be initiated by or coexist with such dermatoses as seborrheic dermatitis or psoriasis. The primary lesion is a patch or plaque (with varying degrees of scaling) which results entirely from repeated rubbing or scratching. An acute dermatitis may develop secondarily from infection or sensitization to topical medications. Less commonly seen lesions in chronic cases are the hypertrophic or verrucous lesions on the lower

legs, or the hyperkeratotic nodular lesions known as prurigo nodularis, most often seen on the extremities. Areas of involvement may be single or multiple. Lesions are frequently seen on the extremities (especially outer lower legs), occipital region (commonly psoriasiform in women), wrists, extensor surface of forearms, elbows, and thighs. Probably many cases of genital and perianal pruritus represent localized "neurodermatitis." The dermatitis of LSC will generally resolve if scratching is prevented. However, at times this may be nearly impossible to achieve. Also, the patient may substitute another skin site or organ as his psychosomatic outlet.

The most important therapeutic maneuver is to explain to the patient that the skin changes will resolve if he stops scratching or rubbing. Potent topical corticosteroids, with their antipruritic effect, have greatly aided the management of LSC. Use of a corticosteroid cream or ointment bid to qid will significantly decrease the pruritus. More aggressive therapy includes occlusion of topical corticosteroids, use of corticosteroid-impregnated tape, or intralesional injection of a corticosteroid suspension. These latter modalities are useful for treating resistant plaque lesions and hypertrophic lesions and are necessary for treating prurigo nodularis. Pruritus will be increased if the skin is dry, thus bath oils or emollients may be helpful, along with decreasing bathing frequency if necessary. Topical local anesthetic agents are generally not recommended because of risk of sensitization. Cool compresses are helpful in relieving episodes of pruritus. If all else fails the application of a fixed dressing such as Plastex gauze or modified Unna boot (Dome-Paste bandage) will prevent scratching and allow more rapid involution of the dermatitis.

Stasis Dermatitis

Stasis dermatitis is defined as dermatitis of the lower legs in association with venous stasis. If ignored or inadequately treated in its earlier stages, persistent dermatitis and ulceration may result, which may be extremely difficult to manage. Cutaneous changes in chronic venous insufficiency may include hemosiderin deposition, varicosities, induration, indurated cellulitis, stasis dermatitis, and stasis ulceration. The initial signs may be only slight reddish-brown hemosiderin deposition, pruritus, or cyanotic erythema, usually just above the medial malleolus. Edema or varicosities are not always present. Development of an inflammatory dermatitis is believed to occur secondary to stretching and cracking of the

skin, scratching, and irritant or allergic sensitization to topical treatment. The skin of the lower leg in stasis dermatitis is extremely vulnerable to sensitization reactions.

Chronic venous insufficiency frequently develops after thrombophlebitis of the deep leg veins with subsequent destruction of valves in the deep and perforating veins. Other causes of the stasis syndrome include congestive heart disease, chronic liver disease, the nephrotic syndrome, arteriovenous fistulae, congenital deficiency or absence of venous valves or veins, and severe varicose veins. Venous insufficiency causes ambulatory venous hypertension and subsequent venous stasis.

All topical or systemic therapy will be of little or no value unless dealing with the venous stasis is given top priority from the first day of treatment. Elevation of the legs above the heart as often as possible is essential. If secondary infection is present, the patient should be at bed-rest with his legs elevated 15-30°. Wet compresses should be applied every three to four hours. Systemic antibiotics are recommended, such as erythromycin 1 gm/day. If ulceration is present manual debridement should be done. As soon as active infection subsides (usually two to three days) ambulatory treatment can be started.

The use of a modified Unna boot (Dome-Paste bandage) to decrease venous stasis can eliminate prolonged bedrest or hospital stays in the treatment of stasis dermatitis and ulcers and permit more rapid return to normal activity.⁴¹ The dressings provide compression and protection and contain very rarely sensitizing substances. If oozing is present the area may be painted with 1% Gentian Violet solution, or a corticosteroid lotion may be applied. The Unna boot is then applied directly next to the skin from just proximal to the toes to just below the popliteal space. The boot is then covered with Tubegauze or an elastic bandage. If ulceration is present 1% Gentian Violet solution should be painted on the ulcer bed and any oozing skin. Fine mesh gauze is applied over the ulcer and then padded with a few 4 x 4 cotton gauze pads. As a further means to decrease local venous pressure over the ulcer, place either a rolled Kling or Kerlix gauze, "mechanic's waste," or a foam rubber pad over the region of the ulcer, and then apply the Unna boot and elastic bandage over this.⁴¹ The boot should be changed every seven to ten days unless significant oozing requires more frequent changes. If an "id" reaction or shower of nummular

DERMATITIS/Kulp

eczema-like lesions develops, a short course of prednisone may be helpful.

When the active dermatitis resolves, the patient should be reminded that venous insufficiency is a lifelong problem. Proprietary support hose may not provide satisfactory support. Jobst stockings are recommended (below-the-knee type). Ideally these should be applied in the morning before arising and taken off at night. The following maintenance regimen is suggested: (1) lubricate at night, (2) elevate foot of bed six inches with blocks, (3) elevate legs above the heart as much as possible during the day, (4) on public transportation vehicles such as planes, walk for five minutes every hour, (5) avoid prolonged standing, and (6) avoid constricting clothing.⁴¹ Surgical therapy for venous insufficiency at times is helpful but is not always indicated.

Infectious Dermatitis

The term "infectious eczematoid dermatitis" refers to a secondary acute dermatitis which develops in direct contiguity to a primary process acting as a source of infectious exudate. This primary process may be a draining ear or nose, furuncle, or exudative wound. The pathogenesis may be related to infection, and an allergic component has not been proved. Treatment involves wet compresses, systemic antibiotic therapy for the primary process, and topical corticosteroids to reduce inflammation.

Dermatophyte infections of the skin can produce an inflammatory dermatitis. Inflammatory lesions of tinea pedis may present with intertriginous scaling or as vesiculobullous lesions. Diagnosis can be confirmed by demonstrating hyphae on a direct KOH prep of involved areas. If secondary infection is present, systemic antibiotics may be used as well as wet compresses or soaks. Oral microsize griseofulvin 500 mg po bid with meals for two to three weeks or topical treatment with miconazole (MicaTin) or clotrimazole (Lotrimin) creams or solutions is usually effective. Griseofulvin should be used for cases not responding to topical therapy after two weeks if diagnosis is certain. The management of tinea pedis also includes drying between toes after bathing, exposing feet to open air as often as possible, the use of a medicated (ZeaSORB) or nonmedicated dusting powder between toes, fresh socks daily, and alternating pairs of shoes every other day to allow drying out.

Dermatophyte infection of the groin or other areas can be treated with griseofulvin 1 gm/day for two to three weeks or with topical miconazole or clotrimazole bid. A recent study has shown clotrimazole more effective than haloprogin for tinea cruris and has suggested that fewer relapses might occur if treatment were continued longer than 14 days.⁴² If creams or solutions are used, it seems advisable to continue therapy about two weeks after clinical resolution to decrease the frequency of relapse. Factors encouraging relapse or resistance to therapy are use of athletic supporters or bathing suits which increase moisture and maceration of the groin.

Eczematous reactions can also occur in skin infections due to *Candida albicans*. Lesions of moniliasis are usually more erosive than scaly and usually occur in moist intertriginous areas such as the groin, inguinal and intergluteal folds, under the breasts or fat rolls in the obese, or in the corners of the mouth. A scalloped border and satellite vesicopustules at the spreading edge are helpful diagnostic clues. Direct KOH prep of the exudate will often demonstrate budding yeasts or pseudohyphae. Frequently associated endocrine diseases (most commonly diabetes mellitus) or immunosuppression should be ruled out in resistant or extensive cases. Management begins with good hygiene and drying of the skin, and wet compresses if indicated. Definitive treatment involves the application of creams, solutions, or powders of nystatin, amphotericin B, miconazole, or clotrimazole. The latter two agents are effective for *Candida* and dermatophyte infections.

Dermatitis of Hands and Feet

Therapy of chronic inflammatory dermatoses of the hands and feet is one of the most difficult areas in dermatologic practice. Contact dermatitis due to primary irritants or sensitizers is the most common cause of acute hand and foot dermatitis. Jordan⁴³ found a 17% incidence of uncomplicated allergic contact dermatitis in 220 cases of "hand eczema." Uncomplicated "housewives hands" is usually a primary irritant dermatitis. However, allergic contact dermatitis to vegetables has recently been reported.⁴⁴ This dermatitis presented usually as scaling and fissuring on the tips of the thumb and index fingers associated with severe pruritus. Most cases of irritant contact dermatitis respond to avoidance of irritants and use of nonsensitizing emollients and topical corticosteroids. A short course of systemic corticosteroids may be indicated in severe acute contact dermatitis of the hands. It is a

common practice to recommend the use of cotton-lined rubber gloves or washable cotton gloves underneath rubber gloves during exposure to potential irritants or sensitizers. Schorr¹⁵ recommends complete isolation from the inciting factors until the inflamed hands are healed. He feels that all potential sensitizers (including rubber gloves) should be avoided during this vulnerable period. Epstein⁴⁵ recommends the use of vinyl gloves (BP nonsterile examination gloves) as less sensitizing. Patch testing should be done in cases of suspected allergic contact dermatitis or other chronic dermatitis not responding to therapy. Generally dermatitis limited to the more sensitive dorsal skin of hands or feet is usually of external cause, and that limited to the volar surfaces is more often of endogenous origin.

Superficial dermatophyte infection is an infrequent cause of hand dermatitis, but can be diagnosed with a direct KOH prep or culture on Sabouraud's agar or DTM (dermatophyte test medium). However, a dermatophytid reaction may present as an acute vesicular eruption only on the hands, or as a generalized reaction. This is believed to be due to sensitization to a fungal allergen from a distant inflammatory source such as the feet. No fungi are present in the hand lesions. Treatment involves eradicating the primary fungal infection at the distant site, as well as compresses and topical corticosteroids for the hands.

Dyshidrosis (dyshidrotic eczema, pompholyx) is sometimes regarded as a wastebasket term for otherwise unclassified scaling hand or foot eczemas. However, dyshidrosis is generally defined as a recurrent noninflammatory vesicular eruption of the palms and/or soles. It is often associated with hyperhidrosis, and pruritus is frequently present. The etiology is not known. Some feel it represents a nonspecific reaction pattern of the palmar and plantar skin.⁴⁶ Others feel emotional stress plays a predominant role.⁴⁷ These small, deep-seated vesicles are most often seen on the sides and tips of the digits. The vesicles contain plasma, not sweat, and are generally regarded as not in communication with sweat glands. Disappearance of the vesicles occurs by absorption of the plasma rather than rupture. The vesicles generally subside spontaneously in a week or two. Whether inflammatory or noninflammatory scaling of the hands or feet (dyshidrotic eczema) occurs in the spectrum of pure dyshidrosis or is a secondary process is a matter of debate.⁴⁶ The scaling may be a normal

sequel to involution of the vesicles³² or may result from scratching and irritation.⁴⁰ Mild dyshidrosis may require no treatment. Dyshidrotic eczema generally can be controlled, but not cured. Topical corticosteroids are beneficial, especially with plastic film or vinyl glove occlusion overnight. Corticosteroid impregnated tape may be useful, especially during athletic events that require use of the involved hand. Intralesional corticosteroid injections using 2 mg to 10 mg/cc may be helpful. Hyperhidrosis may be partially relieved by anticholinergic drugs such as methantheline (Banthine) but their use is often stopped due to uncomfortable drying effects.

Chronic hand dermatitis, other than primary irritant dermatitis, is usually of endogenous cause. The common underlying diseases include psoriasis, atopic dermatitis, dyshidrosis, nummular eczema, pustular psoriasis, and other pustuloses of the palms and soles. Treatment generally involves the use of potent topical corticosteroid creams or ointments and the avoidance of irritants and sensitizers. Dermatitis affecting the dorsum of the hand may be treated with or without occlusion. Dermatitis involving the palms is treated with the most potent corticosteroid cream or ointment under occlusion overnight with vinyl gloves. Unresponsive localized areas can often be successfully treated with intermittent intralesional corticosteroid injections. Systemic corticosteroids may be used in short courses for severe exacerbations. However, the use of systemic steroids for ordinary or erythrodermic psoriasis may precipitate generalized pustular psoriasis.⁴⁸ Other treatments include the use of topical coal tar preparations or grenz ray therapy. Photochemotherapy (PUVA) has recently been reported as an effective treatment for palmar or plantar psoriasis.⁴⁹

The various pustuloses of the palms and soles are notoriously resistant to therapy. Additional therapeutic modalities occasionally used for these conditions include systemic or topical methotrexate⁵⁰ or topical mechlorethamine HCl, a nitrogen mustard.^{51,52}

Infantile Eczema

Atopic dermatitis is the most common form of widespread eczema in infants. It may be impossible to predict whether any individual case of infantile eczema will eventually develop into characteristic atopic dermatitis. The skin of infants is more susceptible to primary irritants than that of an adult. True allergic contact dermatitis is rare in infants. Two excellent studies^{53,54} have recently been published regarding diaper derma-

titis. These studies refute the widespread belief that urea-splitting organisms in the presence of urine produce ammonia which incites the common diaper dermatitis. The authors suggest that the most common type of diaper dermatitis is chafing dermatitis produced by friction and maceration of constantly wet skin. The levels of free ammonia and number of urea-splitting organisms from diaper squeezings were not significantly different in normal infants or those with diaper dermatitis. However, exacerbation of existing diaper dermatitis by ammonia could not be ruled out. The conclusion is that attempts to acidify the urine or use antimicrobial agents in diapers are superfluous.

Chafing dermatitis is the most common form of diaper dermatitis. It is present only in the diaper area and appears as a mild erythema with a shiny glazed surface and occasional papules. If neglected it may become papuloerrosive and secondarily infected. Treatment consists of simple drying measures, frequent diaper changes, and possibly a dilute corticosteroid cream such as 1% hydrocortisone. Zinc oxide paste, Desitin ointment, or A and D ointment may be used to protect the inflamed skin from soiling when diapers are worn. Moniliasis appears clinically as in adults, but with more confluent involvement in the diaper area. Treatment with nystatin, miconazole, or clotrimazole creams or solutions is recommended. One percent Gentian Violet solution may be helpful in resistant cases. Moniliasis with "id" reaction may occur with a widespread eruption or erythematous scaly patches or plaques on the extremities, neck, and scalp in the presence of typical moniliasis of the diaper area. The primary moniliasis is treated as above and the "id" sites with a topical steroid cream or lotion. Seborrheic dermatitis in infants may manifest itself initially as noninflammatory scaling known as "cradle cap." More advanced cases present with erythema and scaling, particularly in the groin, buttock areas, retroauricular region, axillae, limb creases, and scalp. Treatment consists of frequent use of mild shampoos, as well as topical corticosteroid lotions or creams. Selenium sulfide or tar shampoos may be used in resistant cases. The term Leiner's disease has been used for exfoliative seborrheic dermatitis in infants. However, at present it now is often reserved for a frequently fatal familial disease with cutaneous changes resembling exfoliative seborrheic derma-

titis. These patients have a functional deficiency of opsonic activity of serum complement (C5), intractable diarrhea, local and systemic infection, and wasting. Family members also have a functional C5 deficiency. Fresh plasma can provide a lifesaving source of C5. Other treatment includes topical corticosteroids, as well as treatment of secondary infection, protein loss, and defective heat regulation.

Psoriasis in infants usually presents as well-margined erythematous plaques with heavy scale in the diaper area, scalp, or trunk. There may be a family history of psoriasis. Treatment consists of topical corticosteroid preparations.

Xerosis

Xerosis is also known as dry skin, xerotic eczema, winter itch, and asteatotic eczema. This may be manifest as only generalized dry skin with slight scaling of the lower legs. However, there may be dehydrated patches of skin showing erythema, dry scaling, and fine cracking which may resemble cracked porcelain (eczema craquele). The patches may occur over many parts of the skin, most frequently on the extremities. Xerosis occurs most commonly in the winter. Treatment includes increasing the humidity of air in the house if possible, lowering the room temperature, limiting bathing frequency, and use of bath oils and emollients, such as hydrophilic ointment USP.

Perioral Dermatitis

Perioral dermatitis (PD) is considered a distinct entity because of its typical clinical presentation and age and sex distribution. It usually occurs in women of childbearing age, but occasionally in men. The primary lesion is a small pinhead-sized papule or papulovesicle which is flesh-colored or red. The primary lesion regresses leaving a more diffuse redness and slight dry scale. Local pruritus or burning sensation may be present. The eruption may involve most of the area bordered by the nasolabial folds and sides of the chin. There is usually a clear zone around the vermilion border of the lips. Although usually bilaterally symmetrical it may be unilateral. The etiology of PD is unknown. Some consider it a variant of seborrheic dermatitis or rosacea. Other possible etiologic factors considered include sunlight sensitivity, hormonal factors, contraceptive pills, prolonged use of fluorinated topical corticosteroids, *C. albicans*, and emotional stress. Recent reports incriminate excessive use of moisturizing creams⁵⁵ or fluoride toothpastes.^{56,57}

The course may be one of cycles of days to months or simply a chronic eruption. It may persist for months to years.

Treatment is generally agreed upon. If topical fluorinated corticosteroids are being used, change to a 1% hydrocortisone cream or lotion to decrease rebound flares. Tetracycline 250 mg bid to qid for three months has been shown to clear most cases.⁵ Ampicillin may be as effective as tetracycline.⁵⁸ In light of recent reports, it seems advisable to use a nonfluoride toothpaste and change to less occlusive moisturizers such as Wibi lotion or Cetaphil lotion.

Exfoliative Dermatitis

Exfoliative dermatitis (ED) refers to the involvement of all or most of the skin surface by a scaling erythematous dermatitis. It can develop in association with such systemic diseases as lymphoma, leukemia, a few carcinomas, and by unknown mechanisms. Other initiating causes may be drug reactions, extension of preexisting skin diseases, or universal involvement in contact dermatitis. The cause may be undetermined (idiopathic) in 10% to 50% of cases. Hurley (1975)⁵⁹ reviewed many reports on ED and listed the following as causative factors in decreasing order of occurrence: preexisting cutaneous diseases, idiopathic lymphoma and leukemia, drugs, and contact dermatitis. In their review of 135 cases of ED, Nicolis and Helwig⁶⁰ found drugs the most common cause, followed by preexisting dermatoses. Cases associated with lymphomas usually presented no signs of malignancy, but were suspect due to lack of response to therapy. The onset of ED is more often acute when caused by reticuloses, drug reactions, or contact allergy. At times careful continued clinical examination may reveal local changes characteristic of the primary causative disease.

Changes suggestive of preexisting psoriasis include typical silver-white scale, heavier involvement of elbows, knees, or lumbosacral region, or typical nail dystrophy. Psoriatic pustules may herald the onset of often fatal pustular psoriasis. Features suggesting underlying atopic dermatitis include flexural or neck lichenification, white dermographism, intense pruritus, atopic epicanthal folds of lower eyelids, or eosinophilia.

ED may develop from stasis dermatitis complicated by autosensitization or contact allergy to topically applied medication. Suggestive signs may include evidence of venous stasis, active dermatitis or ulcers, postinflammatory hyperpigmentation, or scars from previous ulcers. An

etiologic role for lichen planus may be suspected in the presence of characteristic violaceous angulated papules, or typical lacy white mucosal lesions involving the mouth, penis, and vagina. Mites seen on direct KOH prep of the scales suggest a possible etiologic role for scabies. Contact or photocontact dermatitis may be suggested by greater inflammation at contact sites or relative sparing of certain areas.

There are no specific clinical signs to suggest a causative role for drugs. Frequently, however, the onset is rather acute and symmetrical, with prominent erythema and possibly purpura present in dependent areas. Some of the most commonly used drugs which may induce ED include penicillin, sulfonamides, barbiturates, gold, isoniazid, and phenothiazines.

Toxic epidermal necrolysis (also known as Ritter's disease or scalded skin syndrome in children) has recently been divided into two unrelated entities.⁶¹ The term staphylococcal scalded skin syndrome is reserved solely for a less severe form primarily affecting children under 5 years of age. This form is believed to be caused by elaboration of a staphylococcal epidermolytic toxin and characteristically affects the face, neck, axillae, and groin initially. Other characteristics include short course (two to four days), very low mortality, and treatment with penicillinase-resistant penicillin.

The term toxic epidermal necrolysis is reserved for the more severe form which affects mainly adults. The etiology of this form is unknown but it is often associated with drug intake. Other characteristics of this form include exfoliation occurring simultaneously over most of the body surface, longer course (one to three weeks), 25% to 50% mortality, and treatment of choice being high doses of systemic corticosteroids.

Exfoliative seborrheic dermatitis in infants has been discussed. It is most often confused with staphylococcal scalded skin syndrome and atopic dermatitis. Seborrheic dermatitis is an infrequent cause of exfoliative dermatitis in adults. Other dermatoses which may develop into ED include ichthyosiform dermatoses, pityriasis rubra pilaris, pemphigus foliaceus, and eczema of unknown origin. Signs suggestive of a leukemic or lymphomatous causation include pruritus, skin infiltration (i.e., leonine facies), or lymphadenopathy showing specific histologic changes. Continued observation and evaluation of idiopathic cases may eventually lead to a specific diagnosis.

Surprisingly, a marked constitutional reaction

DERMATITIS/Kulp

is not usually seen in ED. Idiopathic ED and ED associated with preexisting skin disease is usually tolerated well and should be treated cautiously. It does not necessarily represent a medical emergency. Low-grade fever and chills may be present. Common clinical findings in most cases of ED include loss of some scalp or body hair, dystrophic nail changes, gynecomastia, nonspecific lymphadenopathy (especially cervical, axillary, and inguinal). Although nonspecific dermatopathic lymphadenopathy is often present, biopsy of enlarged lymph nodes (preferred over aspiration) is recommended in all cases of ED when no other cause is evident. Physiologic alterations in ED include increased skin blood flow (which may produce high-output cardiac failure), impaired temperature regulation, increased metabolic rate, increased cutaneous water loss, protein loss from exfoliation as well as from frequently found enteropathy, and folate loss.

A skin biopsy should be taken, with care to choose a characteristic skin lesion if a specific primary disease is suggested. Histopathology is usually nonspecific, but occasionally specific diagnoses are evident. Laboratory findings are nonspecific and usually reveal elevated sedimentation rate, decreased serum albumin, relative increase in serum globulin, steatorrhea, and possibly signs of cardiac failure. Leukemia or lymphoma may be detected from a blood count.

The distinction between an extensive dermatitis and true ED may at times be arbitrary. In classic ED, erythroderma and recurrent desquamation are usually evident.

The course of ED depends on the response to treatment of the underlying disorder. Some preexisting diseases may spontaneously resolve or temporarily remit. Resolution of ED secondary to psoriasis, atopic-dermatitis, or seborrheic dermatitis is usually slow but almost always occurs. The prognosis in patients with idiopathic ED is often poor because the disease may persist indefinitely, often with multiple exacerbations. Most deaths associated with ED are secondary to infection with sepsis, pneumonia, or heart failure.

Hospitalization is indicated, as systemic corticosteroids are often needed, especially in idiopathic cases. However, systemic corticosteroids are usually contraindicated in psoriasis due to the possibility of precipitating generalized pustular psoriasis.⁴⁸ Exfoliative seborrheic or atopic dermatitis can sometimes be managed without systemic corticosteroids. Hurley⁵⁹ suggests starting

with 30 mg to 40 mg of prednisone per day. This may be increased by 20 mg if no response occurs in three to four days. Further increases in dosage to a level producing clearing of skin may be necessary. Long-term prednisone therapy may be necessary if no treatable cause is found. A maintenance dose of 10 mg/day or less may be possible. Systemic antibiotics are indicated in presence of secondary infection. Antihistamines may be used for pruritus. Topical therapy includes frequent lukewarm tub baths (possibly with oatmeal or cornstarch suspension), followed by application of nonirritating lotions such as wetting lotion with 15% olive oil or oil-lime water lotion. Depending on the hydration status of the skin, corticosteroid creams or ointments may also be used. Use of methotrexate or other antimetabolites may be indicated if underlying the cause is psoriasis, pityriasis rubra pilaris, lymphoma, or leukemia. Ultraviolet light therapy may be beneficial in exfoliative mycosis fungoides. Photochemotherapy (PUVA) of generalized exfoliative seborrheic dermatitis has been reported successful and has been suggested as an alternative to systemic corticosteroids, as well as helpful concomitant therapy while tapering patients already on systemic corticosteroids.⁶²

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Continued on page 830

... in functional G.I. disorders*

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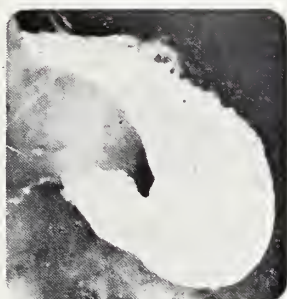
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†See Warnings, Precautions and Adverse Reactions.

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THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

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CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient; unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. **WARNINGS:** In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. **PRECAUTIONS:** Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: autonomic neuropathy; hepatic or renal disease; ulcerative colitis—Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon; hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension; hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

It should be noted that the use of anticholinergic/antispasmodic drugs in the treatment of gastric ulcer may produce a delay in gastric emptying time and may complicate such therapy (antral stasis). Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. **ADVERSE REACTIONS:** Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia; increased ocular tension; loss of taste; headache; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. **DOSAGE AND ADMINISTRATION:** Dosage must be adjusted to individual patient's needs.

Usual Dosage: Bentyl 10 mg. capsule and syrup: Adults: 1 or 2 capsules or teaspoonfuls syrup three or four times daily. Children: 1 capsule or teaspoonful syrup three or four times daily. Infants: ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg.: Adults: 1 tablet three or four times daily. Bentyl Injection: Adults: 2 ml. (20 mg.) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. **MANAGEMENT OF OVERDOSE:** The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine® (bethanechol chloride USP) should be used.

Product Information as of October, 1976

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Psoriasis

THOMAS F. GOODMAN, JR., M.D.

Introduction

Although one tends to think of psoriasis as a "dermatologist's disease," it is a health problem of such magnitude that all physicians need to have some understanding of it. The scope of the disease called psoriasis is reflected in the number of individuals affected, the dollars spent on treatment, and the physical and psychological disability it causes.

Incidence

How many people have psoriasis? Published statistics say 2% to 4% of our population, which works out to 4 to 8 million persons in the United States and 80,000 to 160,000 in Tennessee. The incidence is lower in the black population, a fact which must be considered when calculating total numbers. Most physicians (even dermatologists) in practice do not see enough psoriasis cases to make up 2% to 4% of their daily patient load. It seems a lot of people with psoriasis no longer consult physicians because they have not been helped enough by them. A lot of physicians, personally frustrated by their inability to help the psoriatic, push those patients away by their negative attitudes toward treatments.

How many dollars are spent on psoriasis? The total is said to be \$1 billion annually.¹ This is not hard to imagine when one considers the high cost of modern prescription medicines, office calls, hospitalization, and lost man-hours. In addition, the abundance of advertisements for psoriasis remedies indicates that over-the-counter patent medicines are a big business.

Disability

Psoriasis is a disease of extremely variable expression. It is easy to understand the physical disability caused by severe psoriatic arthritis or palmar involvement which causes the hands to split and bleed. It is not difficult to understand the loss of a "white collar" job from extensive cutaneous involvement. Even minor psoriasis can affect the livelihood of, for example, a fashion model.

Psychological disability is another major problem. A sympathetic physician who sees very much psoriasis will testify that the "heartbreak of psoriasis" is no joke. There exist very few individuals with so little respect for their body images that they do not want to "feel pretty." An attractive young woman with generalized psoriasis is not physically sick but is likely to be devastated, and even a little psoriasis can cause problems with self-image, marriages, peer acceptance, and employment. It is said that alcohol makes psoriasis worse (a lot of psoriatics seem to drink too much). There may be more truth in saying that the frustrations of having psoriasis drive many affected persons to excessive drinking.

Etiology

"Doctor, is it true that they still don't know what causes psoriasis?" More is known than ever about biochemical changes and epidermal cell kinetics in psoriasis,² but their cause is still elusive.

Many psoriatics can name an ancestor who had psoriasis, many cannot. The pattern of inheritance is not perfectly clear. Certain people seem to inherit the tendency to have psoriasis; some much more so than others. Unknown factors may provoke latent psoriasis to express itself clinically.

Clinical Types

The clinical expression of psoriasis is quite variable in extent and type. Some of the common clinical expressions of the disease are listed below.

Plaque type. This most common form presents as indolent, usually stable lesions which are oval, thick, red, and have silvery scales. The common sites for such lesions are scalp, elbows, knees, lower legs, and lower back, but they may be anywhere.

Acute guttate type. This is rapidly erupting form with smaller, more inflammatory lesions. It is more common in children and young adults and is often the presenting problem in a new case of psoriasis.

Exfoliative or erythrodermic type. This is another acute problem involving the whole body or nearly so. Fever, malaise, adenopathy may accompany this type. The patient is red and scaly all over and usually sick.

Pustular psoriasis is one of the more severe

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forms. Stable plaques of psoriasis may develop sterile pustules. This is a sign of worsening. It may also be caused by therapy which is too aggressive and irritating. Another form of pustular psoriasis (much rarer) presents as a widespread eruption of pustules with fever and leukocytosis. This relapsing, disabling form of psoriasis has a poor prognosis. Systemic steroids may provoke this syndrome.

Inverse type. Here the lesions tend to be more prominent on flexor surfaces of skin, especially groins and axillae. The lesions tend to be more moist, less thick and scaly.

Pustular eruption of the palms and soles. This is probably a form of psoriasis which in some patients may eventuate in typical widespread psoriasis. The pustules are sterile.

Psoriasis of the nails presents as thick, crumbly, dystrophic nails, or as thin, brittle nails with detachment from the underlying nail bed. It may be the sole presentation of psoriasis or may be present as a feature of any other type. All nails are involved more or less equally. Simple pitting of the nails is quite common in psoriasis.

The "Koebner" phenomenon is the eruption of psoriasis in an area of skin trauma. Operative incisions, simple scratches, injections, and thermal or ultraviolet burns are examples. The tendency to this type reaction is extremely variable.

Natural History

The natural history of psoriasis is as variable as the clinical expressions of psoriasis. Psoriasis may appear at any age but it is rare before 3 years. All forms of psoriasis are subject to exacerbations and remissions. The disease may completely disappear or persist throughout life, and one form may change into another.

Associated Diseases

A specific form of arthritis is associated with a significant percentage of cases. Like rheumatoid arthritis it may be just a bother or it may be totally disabling.

Whether diabetes, liver disease, occlusive vascular disease, and gout are seen more frequently in the psoriatic population remains a question. These associations have been pondered. Some of the studies have found associations of these problems with psoriasis; some have not.

All physicians should be aware that an increased uric acid level is a common finding in psoriasis. Many psoriatics with various types of

arthritis have been said to have gout solely on the basis of this increased uric acid.

Diagnosis

A physician who deals with a lot of skin disease will not often err in diagnosis if the total clinical picture, history, and biopsy are considered, but mistakes are made.

There are too many patients with chronic eczema, chronic fungus infections, or even chronic discoid lupus erythematosus, who have been told they have psoriasis and treated as such. Skin biopsy is valuable and should be done when any doubt exists. Certain kinds of psoriatic lesions show characteristic pathological changes; others do not. Biopsy will certainly serve to exclude certain other skin disease which may mimic psoriasis.

Treatment

One of the main skin abnormalities in psoriasis seems to be either an increase in the speed of epidermal cell turnover or an abnormally large population of cycling cells. Most of the old and new treatments for psoriasis are known to affect these epidermal cell kinetics, to which at least part of the therapeutic effectiveness can be attributed.

The treatment of psoriasis is nearly as varied as the expressions of the disease. Specific therapies to control psoriasis are mentioned here with the reservation that the physician's art is a very large factor in the use of these modalities. Good general health measures such as rest, recreation, exercise, sunshine, and fresh air help psoriasis as well as other problems. Weight loss for the obese and decreased alcohol consumption are also beneficial in some patients.

It is important to note that some "hot" (acute) cases of psoriasis may be made worse by the wrong therapies. An aggressive approach must not be taken in acute cases. Generally, bedrest, low strength topical steroids, and lubricants will get an acute case to the point that it can be more definitively treated.

Scalp psoriasis remains the most difficult problem to manage since hair, and the patient's desire for that hair to look nice, get in the way of medicaments. Use of one of the many tar shampoos in the morning, after an overnight application of some of the topicals mentioned below, seems to be the best program.

Potent fluorinated steroid creams and ointments (Lidex, Diprosone, Halog) are of great value in limited areas of psoriasis but they are not the panacea that journal advertisements would lead

one to believe. Using these several times daily, and the employment of an occlusive plastic film over them, is usually effective in the short term. Prolonged use in any area, but especially about the face and genitals, may cause unacceptable dermal atrophy.

Topical tar preparations are more cosmetically acceptable now than ever before (Estar, Psorigel), but they should be used in chronic (not acute) psoriasis. They work better along with topical steroids. They should never be covered by occlusive dressings.

Topical anthralin preparations (Anthra-Derm, Lasan) of various strengths are highly effective in chronic, stable psoriasis. They must not be used in acute or widespread psoriasis. Physicians must familiarize themselves with anthralin's potential for staining clothing and skin and for causing irritation of the eyes.

Very dilute topical flourinated steroid preparations are of great value in "cooling off" an acute case of psoriasis. Dilution with an emollient cream base makes the steroid inexpensive enough for the whole body use.

Ultraviolet light from the sun or sunlamps is helpful in most cases, although it may aggravate some. A severe sunburn from outdoor exposure or sunlamps may do more harm than good. Properly controlled home or office ultraviolet therapy is worthwhile for the well-motivated patient. Even more worthwhile is the combination of topical tar preparations (see above) applied daily and ultraviolet light. This is the backbone of the "Goeckerman" routine used by many university dermatology centers.

Methotrexate is still the easiest, most inexpensive, and most effective control for psoriasis known. Serious short-term and long-term toxicity preclude its use in all but the most desperate cases. Other systemic agents have been used in psoriasis, but the perfect combination of effectiveness and safety has not been found, and research continues in this area. Drugs in this category should only be prescribed by physicians experienced in their use and hazards.

Systemic corticosteroids are mentioned here to emphasize that they should ordinarily not be used in psoriasis. There are a few occasions where they are helpful, but they are very few. Psoriasis tends to rebound and gradually get worse after each round of steroids, and the corner one gets

into can be hard to get out of.

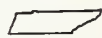
Photochemotherapy using systemic psoralen drugs followed by exposure to long wave ultraviolet light is the latest in therapy for extensive psoriasis.^{3,4} This is a highly effective routine which can clear over 90% of cases treated. It has been called PUVA, the P standing for psoralen and the UVA for ultraviolet "A", long wavelength ultraviolet light of 360 to 400 nm. Patients ingest a dose of psoralen two hours before being exposed to UVA. Repeated treatments (several weekly) will clear most cases within two months. Less frequent maintenance treatments keep most patients clear.

The most effective psoralen is 8-methoxypsoralen (Oxsoralen), an old drug which has been in use for many years for the treatment of vitiligo. Recent large studies⁴ have not shown evidence of toxicity in humans from fairly large doses taken several times weekly for months.

The UVA light source is fairly new. It is a body cabinet furnished with numerous fluorescent UVA tubes, by which a high intensity UVA flux is created. Ultraviolet "A" (UVA) is to be distinguished from ultraviolet "B" (UVB) which is the more familiar, shorter wavelength ultraviolet light. The main radiation produced by sunlamps is UVB, which does not interact with psoralen compounds as UVA does.

This therapy is quite safe in the short term (it has been in use for about three years) if it is expertly administered. Long-term side effects could include skin carcinogenesis, aging or wrinkling of the skin, cataracts if eye protection is not used, and perhaps others. Physicians who use this therapy are comforted by the fact that none of these problems has been known to occur in 20 years of using the same (but less intensive) therapy in vitiligo patients.

Conclusion

Psoriasis is a complex and difficult disease which the skillful, persistent, positive physician can help with old and new therapies. 

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A Primer on the Use of Topicals For Sun Protection

JONATHAN K. WILKIN, M.D.

No longer is sunburn the only reaction to sunlight known to the layman. Through television and popular magazines, a large segment of the public is now well acquainted with the chronic cutaneous changes to sunlight, carcinogenesis and aging. Strong epidemiologic data presented in both lay and medical media emphasize the risk for skin cancers in patients with a fair complexion and blue eyes, in patients with a family history of skin cancers, and in patients who have had skin cancers previously. Not only is the awareness of cutaneous sun damage increasing, but increased longevity, increased leisure time, and a decrease in the body area covered by contemporary fashion are augmenting this problem. It thus becomes incumbent on the physician to know those preventive measures useful in sun protection and a basic account of how they work.

Although the solar spectrum at the surface of the earth extends from wavelengths of 290 to 700 nm, the band of radiation between 290 and 400 nm accounts for nearly all cutaneous light reactions, e.g., sunburn, tanning, carcinogenesis (Table 1). This range is divided into two bands by photobiologists: UVA (320 to 400 nm), which passes through window glass, and UVB (290 to 320 nm), which is blocked out by window glass.¹⁻⁶

Of course the ideal protection for patients at risk for an adverse cutaneous light reaction is shelter. While less effective than remaining indoors, hats, umbrellas and long sleeves provide protection. Since the intensity of sunlight is greatest from 10:00 AM until 2:00 PM, it is during these hours that patients should take the greatest care to avoid sunlight. Beyond these measures are a variety of topical preparations which fall into two classes.^{1,2,5,7}

The first class of topical preparations, the *sun-screens* (Table 2), contain chemical materials

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TABLE 1
CUTANEOUS LIGHT REACTIONS

UVA (320-400 nm)
Darkening of preformed melanin
Photoreactions to many drugs
Porphyria light reactions
Photoreactions to topical agents
UVB (290-320 nm)
Erythema, sunburn
New pigment formation (tanning)
Activate lupus erythematosus
Aging and carcinogenesis

that absorb specific bands of ultraviolet light. Para-aminobenzoic acid (PABA), PABA esters, salicylates, cinnamates, benzophenones and red veterinary petrolatum are the usual active ingredients. The second class of topical preparations, the *sunshades* (Table 3), contain opaque materials that reflect the light. These usually contain titanium dioxide or zinc oxide powders. Occasionally a reflecting ingredient is combined with an absorbing agent.

When the physician is confronted with a patient who needs a sun-protective topical, e.g., a farmer with a fair complexion, the problem is making a rational choice of a sunscreen or sunshade. Among the various factors that determine this selection are (1) the cosmetic acceptance of the product, (2) the effectiveness of the product, and (3) cost.

The acceptance of the preparation by the patient is most important if the patient is to continuously and regularly use the agent. The frequency of application required, allergenicity, irritancy, staining of clothing and messiness of the product all affect patient acceptance.

The effectiveness of the product depends on what is demanded of the topical and the properties of that product. While sunshades (Table 3) reflect all wavelengths from 290 to 400 nm, sunscreens (Table 2) selectively absorb various wavelengths within this spectrum. It is important then that the wavelength range of the cutaneous

TABLE 2
SUNSCREENS

	Absorption Spectrum	PF	Products	Remarks
I. Para-aminobenzoic Acid (PABA)	280-320 nm and some UVA	17.6	Presun Lotion, Presun Gel, Pabanol, Sunbrella	Doesn't wash off readily, but may stain clothing and cause sensitization
II. PABA Esters	280-320 nm	5.5-8.3	Pabafilm, Block Out, Sea and Ski, Sundown, Eclipse Lotion	Less staining than PABA, but very drying and may irritate or sensitize
III. Salicylates	290-320 nm	6.0	Coppertone Suntan Lotion and Oil, QT Quick Tanning Lotion	Low efficacy
IV. Cinnamates	290-320 nm	5.9	Sundare	May sensitize; available as creamy or clear lotion
V. Benzophenones (Diphenylketones)	250-360 nm	5.9-6.7	Uval Sunscreen Lotion, Solbar Cream	Washes off easily
VI. Red Veterinary Petrolatum	290-340 nm	3.2	RVP	Quite gooeey
VII. Combination Products				
A. PABA & Titanium Dioxide	280-400 nm		Solar Cream	Doesn't wash off readily, but is "masklike" when applied
B. Red Veterinary Petrolatum, Zinc Oxide & Cinnamate	250-400 nm	7.7	RV Paque	Greaseless base, but may sensitize
C. Cinoxate & Menthyl Anthranilate	248-400 nm	9.6	Maxafil	May sensitize
D. PABA Ester & Benzophenone	290-370 nm	15+	Supershade -15 ⁹	A new product with minimal consumer experience
E. PABA Ester & Dioxymbenzone	280-320 nm	6.3	Sungard	May sensitize

TABLE 3
SUNSHADES

	Reflection Spectrum	Products	Remarks
I. Zinc Oxide	280-400 nm	Zinc Oxide Ointment	Quite gooeey
II. Titanium Dioxide	280-400 nm	Reflecta	Washes and rubs off readily
III. Titanium Dioxide Combination Products			
A. (see Table 2, VII A)			
B. Titanium Dioxide & Menthyl Anthranilate	280-400 nm	A-Fil Cream	Same disadvantages as Titanium Dioxide (II, above) but obtainable in both neutral and dark shades

TABLE 4
SUN-PROTECTING LIP BALMS

	Absorption Spectrum	Product
I. Salicylate	290-320 nm	Lip Glos Stick
II. Benzophenone	250-360 nm	Uval Sun'N Wind Stick
III. Digalloyl Trioleate	290-320 nm	Sun Stick Lip Protectant
IV. Combination Products		
A. PABA Ester & Titanium Dioxide	280-400 nm	Herpecin-L Cold Sore Lip Balm
B. PABA & Red Veterinary Petrolatum	280-340 nm	RV Paba Lipstick

SUN SCREENS/Wilkin

light reaction is either absorbed or reflected by the topical prescribed. Thus, 5% PABA in alcohol will absorb UVB wavelengths and protect from sunburn. But for a patient with porphyria, a preparation with protection in the UVA range is needed, and the PABA preparation would not be a good choice. Of those agents which absorb or reflect the erythema spectrum, one may calculate a "Protective Factor":⁸

$$\text{Protective Factor} = \frac{\text{Time to develop erythema with sunscreen}}{\text{Time to develop erythema without sunscreen}}$$

Obviously, a higher protective factor gives a greater degree of protection in the sunburn range.

The final factor to consider is cost. If the patient is to continuously and regularly use the preparation indefinitely, economic considerations become very important.

Application of the selected product in the morning and reapplication later in the day are generally sufficient for most sunscreens, except as indicated above. All uncovered areas should receive an application; men should be reminded to protect the ears, and women should protect the calves. Also, we should remember to protect the lips from sun damage (Table 4).

After the physician identifies the patient who needs such preventive measures, he should constantly encourage the patient to use these preparations continuously and regularly. The artful employment of sun-protecting topical preparations will prevent needless skin reactions, cancers and premature aging.

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BRIEF SUMMARY OF PRESCRIBING INFORMATION

ANTIMINTH® (pyrantel pamoate)

ORAL SUSPENSION

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 µg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions: Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth Oral Suspension is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

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Warts — An Approach to a Common Problem

WILLIAM B. HARWELL, M.D.; ROBERT N. BUCHANAN, JR., M.D.;
and JAMES R. HAMILTON, M.D.

Warts represent one of the more common viral diseases found in man and certainly one of the most visible. The DNA papovavirus which is responsible for warts grows only in the epidermis. In spite of their easy availability for study, the natural history of warts remains an enigma. Warts may arise suddenly in an otherwise totally healthy individual, persist indefinitely despite the most valiant efforts, and then disappear seemingly overnight without apparent reason.

Common warts are easily recognized. The most diagnostic feature is the vascular network which appears as small black dots when the wart is pared horizontally to the skin surface. Once recognized, the common wart on the trunk or extremities yields to a variety of treatments. The choice of treatment then depends on availability to the practitioner of treatment modalities and on such considerations as the desired cosmetic result, the number of warts present, the site of warts, and the age of the patient. The practitioner must therefore be flexible in his treatment, and knowledge of various treatment modalities is essential.

Therapy

Electrodesiccation with or without curettage may be used. Usually the wart is anesthetized and lightly touched with the electrocautery and then the wart is easily removed using the spoon shaped curette. With careful use of the cautery on low voltage, scarring is minimal. Healing takes from two to three weeks and there is seldom significant pain following the procedure. It is not necessary to keep the treated areas covered during healing. Topical antibiotics are sometimes used but cleansing with alcohol or hydrogen peroxide is sufficient. A disadvantage is the requirement for the injection of a local anesthetic which may be a painful procedure.

Cryotherapy using liquid nitrogen has become a useful tool with several advantages. No local anesthetic is necessary prior to freezing, but there is transient pain during the procedure. The re-

sultant scar is minimal because the blister separates at the dermal-epidermal junction rather than invading the dermis. Exotic equipment is not required since cotton tipped applicators are quite sufficient. It is important to freeze the entire depth of the wart and with thick warts this may require 15 to 25 seconds of application. The resultant blister may then be ignored and allowed to dry and slough in 10 to 12 days or the blister may be opened and then carefully unroofed. In either event the wart, which resides wholly in the epidermis, will be removed. Healing will take from one to three weeks during which time routine cleansing with alcohol or hydrogen peroxide is recommended. No bandage is required. Care should be used in freezing the lateral aspects of digits since deep freezing may result in neuropathy. Another disadvantage to cryosurgery is the occasional hypopigmentation at the site of freezing.

Cantharidin is a vesicant derived from blistering insects. The use of cantharidin results in separation at the dermal-epidermal junction and therefore removal of the epidermal residing wart. Although this topical medication may be useful in many instances, care must be used when it is employed. Cantharidin is not selective for warts and will blister any portion of the skin to which it is applied. For this reason multiple warts should be treated a few at a time. A single drop of cantharidin should be applied with a small applicator such as a toothpick directly to the wart and then covered with Blenderm tape or Scotch tape and allowed to remain for 24 hours. It is useful to put a green food coloring dye into the bottle to "see" sites of application. At the end of this time a blister will usually be present which, as with liquid nitrogen-induced blisters, may be ignored or carefully unroofed. Some inflammation may be present following the blister formation but this readily resolves with tap water soaks. Occasionally with the use of cantharidin, annular warts may form at the periphery of the blister.

Keratolytics such as salicylic acid or lactic acid alone or in combination are probably the easiest of the treatment modalities to use. These agents

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result in the precipitation of cell proteins and therefore destruction of epidermal cells. A 10% to 15% solution of salicylic acid in flexible collodion may be applied nightly and the macerated skin removed by washing the following morning. This method requires patience and persistence. The period of treatment is long but the healing process following cessation of treatment is rapid. The area should remain dry while undergoing treatment, and cleansing with hydrogen peroxide is suggested.

Psychotherapy has been used for centuries in the treatment of warts. The success of this form of therapy may well be due to the spontaneous involution of warts. Nevertheless, in small children with numerous warts, a period of suggestion is painless, inexpensive, and often yields results.

Special Consideration

Several forms of wart require special consideration. Multiple flat warts on the face tend to be persistent. One of the most difficult problems a physician faces with such warts is the constant patient demand to "do something, anything to get rid of these warts." The necessity of avoiding scarring in this area limits treatment to the less destructive methods. Light freezing with liquid nitrogen to the point of scaling but not blistering is useful. A mild keratolytic such as 5% salicylic acid may offer enough desquamation to remove these difficult warts. Topical tretinoin in the form of Retin A gel has been used recently with success. The patient must be instructed to discontinue shaving, discard cosmetic brushes and avoid other practices which may spread the wart virus.


Periungual warts are another difficult area. Often spread by nail biting, these warts may extensively involve the proximal and lateral nail folds. Some care must be given to curettage or cryosurgery in the area of the proximal nail fold since aggressive treatment may result in a permanent nail dystrophy. Cantharidin is very useful in this area but once again it is advisable to treat one area at a time to avoid excessive irri-

tation. Treatment will not be successful until the patient stops the habit of nail biting.

Discrete plantar warts may be both aggravating and debilitating. Warts present on non-weight-bearing areas may be treated similarly to warts elsewhere on the body, but those present on the heel and on the ball of the foot do require careful consideration. Since curettage and electrodesiccation on the weight-bearing areas may occasionally result in painful scarring, more conservative treatment is often indicated. Keratolytic agents such as 40% salicylic acid or a combination of salicylic acid and lactic acid followed by paring the whitish skin is usually successful.

Mosaic plantar warts present difficulty because of the large area they involve. Formalin 5% or 10% or glutaldehyde 10% to 25% coagulate protein and fix tissue. These agents are painted on warts nightly. Alternatively one may use a soak made with 60 ml of formalin in a gallon of water.

Condyloma acuminata seems to be an increasingly common problem. Podophyllin 25% in compound benzoin tincture may be applied to the warts and left on for three to six hours. Podophyllin is a cytotoxic agent which may work by inhibiting RNA synthesis. Coating the skin surrounding the wart with Vaseline may prevent excessive irritation. In perianal warts treated with podophyllin, it is advisable to give Colace to soften the stools and in women treated for perivaginal warts, Pyridium is often necessary to calm urethral burning. Liquid nitrogen cryosurgery or electrodesiccation are both effective programs in condyloma.

In summary, warts may occur in any part of the body. The diagnosis is usually easily made. The problem is not life-threatening but to the patient is very annoying. At present there is no preventative therapy. Treatment is based on the use of a type of destructive modality—cryosurgery, electrodesiccation, the use of keratolytic chemicals, or vesicants—is often rewarding but at times is disappointing. If one type of treatment fails, another may be successful. 

Acknowledgement:

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Diagnosis of Blistering Skin Diseases

LLOYD E. KING, JR., M.D., Ph.D.

Blistering diseases are not a major cause of visits to physicians (Table 1). However, since the blistering diseases are common causes of rashes and fever in patients, this group of dermatoses frequently needs rapid, specific diagnosis (Table 2).

In this paper a basic approach to the diagnosis of blistering diseases which has been useful in teaching the medical students and housestaff is presented. As general definitions, *blisters* will indicate any superficial, relatively thin-walled eruption containing fluid or air. *Vesicles* are defined as small blisters (< 1 cm) that contain clear or blood-tinged fluid with few or no leukocytes. Lesions larger than vesicles containing the same type of fluid are called *bullae* (> 1 cm). Blisters containing leukocytes primarily are called *pustules* regardless of size. Since many blistering diseases evolve from one type of lesion to another it is helpful to use combinations of terms to describe various stages, i.e., vesiculobullous, vesiculopustular, or papulovesicular. We have excluded acne vulgaris and other papular or primarily pustular diseases from this general discussion although the general definition of blisters given above would include them. Similarly excluded are unusual blistering variants of dermatoses whose characteristic lesions are macules, papules or plaques. Impetigo has been deliberately included, however, because bullous impetigo is common enough to cause diagnostic confusion.

Examination and Classification

The basic mystique of most dermatological diagnoses is the impression that the only element involved is simply "looking" at a rash. By some inapparent method the dermatologist then "knows" what the rash is or is not. Obviously, this method is no more true for a dermatologist than it is for a radiologist, pathologist or any other specialist who must process visual information. Clearly, one recognizes familiar patterns by repetition, but to be precise, more information must be used than simply the overall impression

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TABLE 1
COMMON BLISTERING DISEASES

Infancy	Impetigo Exanthems Miliaria Burns
Childhood	Exanthems Burns Insect bites/infestations (scabies) Atopic dermatitis
Adult	Burns Dyshidrosis Drug eruptions* Erythema multiforme* Herpes simplex Herpes zoster* Contact dermatitis Dermatophytosis Stasis dermatitis* "Id" reactions Scabies
Old Age	All above and Bullous pemphigoid*

*Unlike many of the dermatoses listed in this table these blistering diseases may be the cause of or related to systemic diseases so that a more extensive investigation of the patient's illness is usually required.

or "gestalt" approach. The elements a dermatologist uses to construct a diagnosis consist of the following: (1) global view or general impression; (2) distribution pattern; (3) regional pattern; (4) configuration or grouping of lesions; (5) morphology of individual skin lesions; (6) estimation of duration and severity of the dermatosis; (7) summarizing the essential features of the dermatosis; (8) identification of common clinical patterns and syndromes; (9) reevaluation of patient using a differential diagnosis scheme of the clinical pattern or syndrome and pertinent history and laboratory tests (Table 3).

Diagnosis

Table 4 lists some of the more common skin signs that a trained observer will note when presented with a patient who has a blistering skin disease. Using this outline repetitively has sharpened the differential diagnosis expertise of most trainees. The key elements of this method are understanding what the significance of each item is and the ability to summarize the physical examination finding characteristic of the dermatosis before beginning the history. The specific steps used to categorize the physical findings of the

BLISTERING DISEASES/King

dermatosis are given in the following sections.

Global. Most observers recognize common clinical patterns such as herpes simplex ("fever blisters") or thermal burns. The ability of an observer to recognize general patterns simply reflects the number of defined entities he has seen repetitively. However, even with unfamiliar patterns, it is always important to note the subjective impression of the overall state of health and whether the symptoms are proportional or disproportionate to the amount of skin involved by the dermatosis. It is important to make a mental or written note that the initial impression of the dermatosis is that of a familiar or unfamiliar entity.

Distribution. Many dermatoses have a predilection for specific areas of the body. In many instances the etiology or pathogenesis can be

inferred based on the parts of the body involved. Common examples of this reasoning are skin cancers arising in areas of chronic sun exposure or contact dermatitis due to perfumes or poison ivy. In other instances a dermatosis will localize to specific areas on the body for unknown, but diagnostically important, reasons. Examples of this are dermatitis herpetiformis, lichen planus and pityriasis rosea. Taking the time to learn the expected distribution of such commonly encountered dermatoses as psoriasis, seborrheic dermatitis, atopic dermatosis, scabies and light-related diseases would pay unexpectedly high dividends to the beginning examiner.

Regional. Just as the mechanisms that cause certain dermatoses to be in a preferred *distribution pattern* on the body, the same or other factors can produce a specific regional or localized distribution. Occupational or environmental factors can explain the occurrence of many lesions

TABLE 2
BLISTERING DISEASES IN THE ACUTELY ILL PATIENT

Etiology	Characteristic Lesions
Allergic Reactions	May present with any type or combination of primary and secondary lesions
Drug hypersensitivities	
Toxic epidermal necrolysis*	"Scalded skin" - (+) Nikolsky's sign
Erythema multiforme	Macules, papules, vesiculobullous lesions
Contact dermatitis	
Plants	Linear vesicles or vesicles in sun exposed areas
Chemicals	Vesicle at sites of contact or sun exposed areas
Allergic vasculitis	Vesiculobullous \pm purpura
Viral	
Varicella	Umbilicated papules or vesicles on erythematous base
Generalized herpes zoster	"
Eczema herpeticum	"
Disseminated vaccination	"
Variola (smallpox)	"
Entero viruses	Vesiculobullous \pm purpura
ECHO, coxsackie	"
Hand-foot-and-mouth disease	"
Rickettsia	
Rickettsialpox	Vesiculobullous \pm purpura
Rocky Mountain Spotted Fever	"
Epidemic Typhus	"
Bacteria	
Bacteremia	Vesiculobullous \pm purpura \pm pus
Neisseria	"
Staphylococcus	"
Pseudomonas	"
SBE	"
Bullous impetigo	Pus filled bullae (cloudy)

*May also be due to staphylococcal infections so culture and stains required.

TABLE 3

BASIC APPROACH TO DIAGNOSIS OF SKIN DISEASES

Examine and classify dermatosis
 Brief history of the skin disease
 Rapid diagnostic signs and tests
 Detailed history of skin disease
 Diagnostic tests
 General history and physical
 Additional diagnostic tests or treatments

localized to a specific part or region of the body. As an example scaly lesions on the elbows, knees or scalp would be a preferred site for psoriasis. Also, herpes simplex, chloasma and acne are all readily recognized as occurring characteristically on the face. In searching for regional clues to the correct diagnosis one often finds a subtle or obvious sign of a more generalized process. Patients will often only complain of an eruption in a specific site when in fact they have a systemic disease. Examination of the entire skin surface will insure that no clues are missed.

Configuration. Many dermatoses characteristically produce grouped lesions just as others are characteristically solitary in nature. The overall pattern of grouped lesions is also called its configuration. The more common groupings or configuration of blistering lesions are linear, iris, peripheral, herpetiform and zosteriform (Table 4).

Morphology of Primary Lesions. In making the diagnosis of blistering diseases the most important steps in diagnosis are the recognition of the type of blisters and the likely site of blister formation. Once a blister is recognized the careful examiner will note if only vesicles, pustules or bullae are present or if there is a mixture of the primary lesions together with secondary lesions such as crusts ("scabs"), ulcerations or erosions. The presence of lesions of differing ages also should be noted. When multiple lesions are present one should be pricked with a sterile needle to determine what its contents are by inspection and by laboratory analyses (stain and culture). Unilocular blisters containing only serum or pus will collapse readily, whereas multilocular lesions will collapse slowly or not at all. Of course, papules and tumors will not collapse as inexperienced observers often find with molluscum contagiosum. Other characteristics of the blisters should also be noted as they are of diagnostic significance, e.g., erythematous base, umbilication, tendency to pustulate, coalesce, or resolve. One should always note whether the blisters are tense, flaccid or if

TABLE 4

INITIAL PHYSICAL EXAM OF SKIN—DATA BASE

Examine and classify—circle all that apply.

- A. Global—local or generalized/acute, subacute or chronic/toxic or nontoxic/familiar or non-familiar pattern
- B. Distribution—exposed or nonexposed/sun-sensitive areas/centrifugal or centripetal
- C. Regional—scalp, face, mouth, hands, feet, scapula, buttocks, genitals, other _____
- D. Configuration—iris/zosteriform or herpetiform/ linear or grouped
- E. Morphology—Vesicles only. Base: erythematous or nonerythematous/umbilicated or dew drop. Age: crops or uniform
 Vesiculo: papular, pustular or bullous
 Bullae only: flaccid or tense/cloudy or clear/crusts or erosions
- F. Duration and Severity—atrophy or hypertrophy/hypo- or hyperpigmented/scarring or telangiectasias/excoriations or lichenified/% body involved
-

there is a positive Nikolsky's sign, i.e., thumb pressure on apparently normal skin will cause the epidermis to slide or rub off.

Estimation of Duration and Severity. As the physical examination progresses a specific attempt to categorize the dermatosis as acute, subacute or chronic must be made. To strengthen the global impression already obtained the observer will look for signs of chronicity, e.g., atrophy, pigmentary changes, telangiectasia, lichenification. Frequently, this staging of the dermatosis will allow the observer to integrate into a meaningful entity the multiple lesions seen, e.g., a chronic disease with acute exacerbation. Observing whether the redness or erythema is proportional to the body temperature or if there is a disproportional increase in pain, color, redness, or swelling is useful. A review of the general state or appearance of health should be made and the percent of the body involved noted.

Summary of Essential Features. If all of the above steps have been methodically taken then the summary or word picture of the dermatoses should be relatively easy to communicate. A _____-year-old patient with an acute/subacute/chronic blistering disease primarily involving the _____. The blisters are vesicles/pustules/bullae which are grouped/_____, etc.

The time taken to perform the physical examination initially is not important. The accuracy of diagnosis is the most important criteria, as the speed will rapidly increase as the method becomes more and more familiar.

BLISTERING DISEASES/King

Identification of Common Clinical Patterns.

1. Rash (blister) and fever—Table 2.
 2. Grouped blisters—Table 5—These diseases are commonly observed, and the approach is outlined in the accompanying Table.
 3. Blisters of specific region—Examples of this are blisters on the lips, hands, feet, genitals, etc.
 4. Blister on sun exposed areas—A workup for photosensitive diseases and exposure to exogenous or endogenous photosensitizers is started when this pattern is recognized.
 5. Erythema multiforme syndrome—Table 6.
- History.* The primacy of the "history" in many areas of medicine is unchallenged. However, in cutaneous medicine the history is frequently misleading or wrong unless specific questions arising from the physical findings are pursued. For this reason most students are required to make a diagnosis based on the physical examination before being allowed to question the patient. This practice forces the examiner to carefully assemble all the objective evidence available and summarize the findings before he becomes absorbed intellectually with the historical information. The examiner should not automatically tell the patient what he has found since the patient's chief complaint may have little or nothing to do with the most obvious physical findings. Once the examiner ascertains that the patient's complaints involve some or all of the skin findings the spe-

cific history of the eruption(s) should be obtained. Any discrepancy between the history and the physical findings such as stated age of lesions should be carefully noted. Factitious lesions or nervous tics can only be diagnosed by physical findings plus careful questioning and observation of the patient's reaction to such an obviously disfiguring and painful lesion. Also, most patients will initially deny taking any medicines or having any allergies unless a specific series of questions are asked to elucidate aspirin or laxative usage or previous reactions to perfumes or jewelry. A good rule is to believe only what you can see and ask only those questions related to the most common causes of that type of dermatosis.

Rapid Diagnostic Signs and Tests. Many of the blistering diseases are rapidly separated into subgroups by a few simple techniques or tests. Stroking the skin with a pencil or thumb could elicit the Nikolsky's sign or Darier's sign that would lead to a correct diagnosis. Pricking an eruption to observe whether it is a blister and what type of fluid is present is obviously easy to do. Examination of the fluid by staining and culturing the fluid should be part of any examination. A KOH prep for fungus, a Gram stain for organisms, and a Giemsa stain or a Tzanck preparation could yield a diagnosis in a few minutes. A Wood's light examination of the urine for porphyrins also is a commonly overlooked rapid diagnostic test.

Histopathology. Many clinically confusing blistering diseases can be readily diagnosed by a combination of histopathology and immunofluor-

TABLE 5
GROUPED VESICLES

Dermatosis	Distribution	Grouping	Diagnostic Tests
Contact dermatitis	"Exposed" parts or sites of contact	Linear (plants) or shape of contactant surface	History Biopsy Patch Tests
Herpes simplex	Usually lips or genitalia	Round or irregular flaccid, umbilicated, superficial vesicles (1-10) on an erythematous base	Biopsy Tzanck Serology Tissue Culture
Herpes zoster	Unilateral, dermatomal	Round or oval tense umbilicated vesicles on an erythematous base	"
Dermatitis herpetiformis	Symmetrical, shoulders, buttocks, knees, elbows	Annular and ringed tense vesicles on an erythematous base (like herpes zoster)	Biopsy Immunofluorescence
Pemphigus vulgaris	Mucous membranes, face, upper torso	Annular, flaccid bullae on normal appearing skin	Biopsy (+) Tzanck (+) Nikolsky's sign
Lymphangioma circumscriptum	Any body region	Clustered, clear cysts that resemble vesicles	History Biopsy

escence testing. Although clinically one can often determine the probable site of blister formation by the tendency of the blister to become flaccid with pressure or with a pinprick, by a (+)

TABLE 6
ETIOLOGY OF ERYTHEMA MULTIFORME*

Disease Grouping	Examples
Connective tissue	Lupus erythematosus, periarteritis nodosum
Drug allergies	Penicillin, sulfonamides
Infections	Herpes simplex, infectious mononucleosis
Malignancies	Lymphomas, carcinomas

*Most cases of erythema multiforme cannot be proven to be the result of a specific agent(s) even after extensive work-ups. This list shows the diseases whose course and treatment implicated them as the probable cause of the erythema multiforme.

Nikolsky's sign or a tendency to umbilicate, the best method to confirm the diagnosis is to biopsy a fresh blister using a punch biopsy. The most likely cause of the blister can be determined when the site of blister formation is known as well as the mode of blister formation (Table 7).¹ In the more complex blistering diseases immunofluorescence tests on the involved skin (direct immunofluorescence) or on the patient's serum (indirect immunofluorescence) can be very useful. Immunofluorescent testing of the skin is of most aid in diagnosing or excluding pemphigus, bullous pemphigoid, dermatitis herpetiformis or lupus erythematosus.

Treatment

Treating Without a Diagnosis. In the event that one is unable to arrive at a firm diagnosis it is

TABLE 7
BLISTERS CLASSIFIED MICROSCOPICALLY BY SITE AND MODE OF BLISTER FORMATION*

Type of Blister	Mode of Formation	Site of Formation	Disease
Subcorneal blister	Detachment of horny layer	Subcorneal	Miliaria crystallina Erythema toxicum neonatorum Subcorneal pustular dermatosis Impetigo
Blister due to intracellular degeneration	Separation of cells from one another	Upper epidermis	Epidermolysis bullosa of hands and feet Friction blisters
Spongiotic blister	Intercellular edema	Intraepidermal	Dermatitis (eczema) Incontinentia pigmenti Miliaria rubra
Acantholytic blister	Dissolution of intercellular cement substances	Intraepidermal suprabasal subcorneal	Pemphigus vulgaris Familial benign pemphigus Darier's disease Pemphigus foliaceus
Viral blister	Ballooning degeneration leading to acantholysis	Intraepidermal	Varicella Herpes simplex Varicella-Herpes zoster
Blister due to degeneration of basal cells	Damaged basal cells lose contact with dermis	Subepidermal	Epidermolysis bullosa simplex Erythema multiforme, epidermal type Herpes gestationis Lichen planus Lichen sclerosus et atrophicus Lupus erythematosus
Blister due to degeneration of basement zone	Damage in the structures causing coherence of basal cells	Subepidermal	Epidermolysis bullosa, dystrophic type Urticaria pigmentosa Bullous pemphigoid Benign mucosal pemphigoid Dermatitis herpetiformis Erythema multiforme, dermal type Porphyria cutanea tarda

*Modified from Lever.¹

BLISTERING DISEASES/King

often useful to treat the patients topically with water in several convenient forms. Calamine lotion uses water to cool by evaporation. Applied as a wet dressing water cools by evaporation and is also used to remove pus and debris by a combination of wet to dry dressing or under an occlusive plastic wrap. Hydrocortisone cream, 1%, is also a useful agent which will not obscure the diagnostic signs and is seldom contraindicated. In the face of an obvious pyogenic infection Vioform HC or Mycolog ointment may be useful. The patient should not be treated for more than one week without a strong clinical diagnosis. In the case of bullous lesions the Gram stain, KOH preparation and cultures will direct the initial therapy until the results of the punch biopsy are available. If the blistering disease is fulminant or rapidly progressing, the possibility of toxic epidermal necrolysis, overwhelming infection, or drug reactions should be considered and will require hospitalization to control the disease.

Treating a Specific Dermatoses. With this guide the practitioner should frequently suspect and diagnose specific blistering diseases and be able to use fairly specific therapy. If the treatment appears to be unsatisfactory after a reasonable period of time then consultation and re-evaluation are often very helpful to both the patient and the practitioner to exclude unusual diseases or unusual responses to therapy. More details on treating specific blistering diseases are available in several general texts²⁻³ and a recent review.⁴

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JOHN B. DORIAN

President's page

Impairment — the Profession's Agony in Victory

A lifetime of professional and personal dreams is dissipated by many in medicine because there's no place to turn. Frequently, the compassion exhibited by a physician daily in his practice does not extend to his colleagues.

In 34 states, including Tennessee, state medical associations have implemented, or are in the process of implementing, programs for the rehabilitation of impaired physicians. Our Impaired Physicians Committee was established by the Board of Trustees in April 1978 at the direction of the House of Delegates in Knoxville and will be operational by Jan. 1, 1979.

Most of the thrust for such programs has been generated in the past five years. The impetus is derived from the staggering realization, by the profession, that one out of every ten physicians will be disabled at some time in his practice life, most of them by chemical dependence on alcohol or drugs. There are more than 100 documented physician suicides in this country annually. It is estimated that many more occur, but are not documented as suicides.

The most successful program has been that sponsored by the Medical Association of Georgia. Now in its fourth year of operation, their program has identified 130 physicians with known psychiatric, alcohol, or drug impairment; 91 have agreed to treatment and, most significantly, 70 have been returned to practice.

There is an increasingly voluminous amount of literature on this subject. Two striking aspects are emphasized in the studies. The basic premise is that the sick doctor cannot reach out for help. Compounding the situation, there is a conspiracy of silence which exists among colleagues in regard to such illnesses. Only 44% of physicians in one survey said they would disclose a colleague's disability. These two factors make it imperative that any such effort be directed toward reaching out or soliciting information regarding individual physician problems.

The second premise is that the program must serve in an advocacy role for the affected member. The goal, therefore, must be rehabilitative, not coercive. Until recently, the profession has had little except coercion to bring attention to the matter. This, basically, is why a colleague has been reluctant to be a party in reporting a friend's problem. The coercive approach is useless in solving the overall situation. This fact has been demonstrated repeatedly in Tennessee, as well as in other states.

Briefly, our program will accept information on a special telephone line. It will then be passed to a physician who will be responsible for maintaining confidentiality while verifying the information. Ideally, the physician himself will call; but it just won't happen that way. Initially, more than 50% of the calls will come from spouses. Later, as the program's credibility is established, we expect that physicians will be the chief source.

After verification, the physician will be visited by two other physicians from outside his geographical area. Two or more visits by a pair of confronters or consultants may be necessary before the impaired physician is convinced of our role of advocacy, and that treatment and rehabilitation are possible.

The physician then enters a treatment program. The committee, through its confronters, offers support, advice, encouragement. Areas of concern are family, licensing, disability insurance, and re-entry into practice. Family involvement and aftercare are essential components. Later, the incompetent and dishonest physician's situation will become a part of the program.

More than 45 members of TMA will be involved in this voluntary effort. The program will be structured for Tennessee physicians, not just TMA members, and not just practicing physicians. The goal is rehabilitation through compassion. It is our profession's urgent responsibility to its members.

The Impaired Physicians Committee of the TMA has been in the process of publicizing, within the profession, its proposed approach to this devastating situation. Medical and administrative staffs of hospitals, pharmacists, and nurses are all being made aware of our efforts. Most importantly, the role played by the TMA Auxiliary will be vital to the success of the program.

There are potentially more than 400 physicians in Tennessee who are, through impairment, at serious risk to themselves, their families, and their patients. For the sake of a friend, won't you help us find, treat, and return them to productivity?

Sincerely,

John B. Dorian, M.D.
PRESIDENT

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NOVEMBER, 1978

This has been assumed to mean spiritual needs, but that is not what the Word says, and indeed, taken in context, it could not have meant that, as Paul was talking about how he had been ministered to in prison. Men of faith have always believed God gives to all what they need. David said (Psalm 145), "The Lord is good to all . . . He opens His hand, and satisfies the needs of every living thing. The Lord is righteous in all his ways. . ." The emphasis throughout the Bible is on God meeting our needs as He sees them, and sometimes this is very different from our own perceived needs.

My high school football coach would occasionally bench one of his star athletes and let him sit out a game, his only explanation being, "He can't stand prosperity." It always had a very salubrious effect on the team. Everybody knew what he meant. The same wisdom applies to people generally, and to nations as well. Sometimes God in His wisdom lets us sit one out. It may stretch a lifetime, and nations have been known to topple.

The Pilgrim Fathers left the security of their Dutch haven to brave the ocean crossing to the New World in a craft that was overcrowded and barely seaworthy. They suffered untold hardships, and many of them died. They stopped after their first harvest to thank God for all His bounteous goodness and mercy toward them (hardships and all!).

Should we do less?

J.B.T.

Truth in Packaging

As part of a process of rejuvenation, much of old downtown St. Louis has been torn down, and the demolition process has sometimes left a building or so, large or small, as the sole occupant of an entire block. This makes those buildings very conspicuous, and so my eye was caught by the recitation on the side of one of them of the culinary delights to be found inside. The building was labeled "The Original Restaurant." I suspect "original" referred to the delights, not the restaurant, but what the name implies is that this rather dilapidated brick structure houses the first restaurant known to man. The first construction is perhaps arrogant, the latter clearly absurd—so much so that its stated falsehood is probably ignored except by pedants like me.

We are sloppy in our communication, and that is bad enough. What is worse is that misleading statements are so often deliberate—

editorials

Thanksgiving

The story is told of a man who responded to his pastor's exhortation to tithe by explaining that he could not afford to give that much money away. He said he realized his attitude was wrong, and asked his pastor to pray with him about the matter, whereupon his pastor prayed, "Lord, please reduce our brother's income to the point where he can afford to tithe."

St. Paul said, "My God will supply every need of yours through His great riches in Christ Jesus."

euphemistic for lies. Watergate left destitute any who had previously retained any confidence in government, and a recent survey of children, taken to see what effect television advertising was having on them, found the most common reaction to be, "I don't believe any of that stuff, anyhow." A lawyer friend whose firm represents several advertising agencies told me ad men feel they have a job of selling to do, and as long as they do not themselves endorse an item, they are not being personally dishonest when the advertisement they write for the manufacturer contains patent falsehood. That does not speak well for the state of our commerce, and as it appears to be common knowledge that ads are intended to mislead, ("out of the mouths of babes . . ."), add commerce to government.

People are looking desperately for something to believe in. The number of people who consult their horoscope each morning is appalling, and while it is true that most of them do so without confidence, some individual message may get through to influence their actions through their subconscious. I recently finished off a delicious Chinese dinner with a couple of fortune cookies, which told me, one, "Your present plans will be successful," and two, "You are going to have a new love affair." For me those predictions were mutually exclusive, as my present plans include as high priority not having a new love affair. But it seemed to me rather dangerous advice to toss out before the unsuspecting and often gullible public.

In spite of everything, confidence in the medical profession has remained relatively high. We need, therefore, to be very careful in our communication with our patients and with each other as consultants. We need to constantly remember how hard it is to get a message across intact. The other day a stewardess ended the usual flight briefing with, "Mrs. White and I will be serving you in the cabin, and I'm Mrs. Hudson." A woman behind me, who had been somewhere playing golf and whose tongue was loose at both ends and tied in the middle, had for some time been loudly describing the vicissitudes of her golf game. In the midst of proclaiming as how women don't know how to keep score and so that affects their handicap, she stopped suddenly and said, "Did she say Mr. and Mrs. Hudson will be serving us in the cabin? That is what she said, isn't it? Isn't it?" When nobody corrected her, she said, "I think that's so nice, particularly if they're able to travel together. She did say that,

didn't she?"

A lot has been written about the noncompliant patient, and while it is probably true that some are deliberately uncooperative, sick people are often frightened people, and they are preoccupied with their problems, more so even than my talkative neighbor on the airplane. They are ill prepared to cope with complicated instructions. "Full disclosure" is wasted on them, and "informed consent" is often impossible. The problem is compounded in the old. Perhaps we should consider taping our instructions, giving the patient either the tape or a transcript, to be digested under less stressful conditions and at leisure.

Above all, we need to be very careful about entering into a decision to deceive, especially the gravely ill. The dying patient needs all the support we can give him, and loss of confidence in his physician is devastating. Gratuitous full disclosure is unnecessary, but so is evasiveness and deceit in answer to direct questions. They are equally cruel, and compassion does not require either.

Someone has said we should expect the worst, and when the best happens we will be delighted, rather than the other way around. Perhaps this is not bad advice, considering the possibilities in our highly technologic civilization, even when there is A for effort, for human error and equipment failure. Through the centuries the physician has allowed himself to be almost deified as a miracle worker. Now, however, we are as dependent as everyone else on our gadgets and those who run them. As our escutcheons can be so easily tarnished by blots not of our own making, we need to see to it we do not add any ourselves.

J.B.T.

Peachy-Keen

Point Reyes is a geological anomaly appended to the California Marin County coast, having worked its way northward along the San Andreas Fault some 350 miles over the millenia at the breakneck speed, geologically speaking, of two to three inches a year. If the earth survives, the peninsula will eventually wind up in Alaska. It is now mostly a national seashore, and is to my way of thinking one of the loveliest spots on earth.

Even getting there and back is an experience. Leaving US 101 a few miles north of the Golden Gate Bridge the Sir Francis Drake highway to

the peninsula and ultimately to the point itself leads you through the Samuel P. Taylor State Forest, which is one of the finest stands of redwood in California, which means anywhere. Mornings tend to be foggy, and if you left early, by the time you reach the forest the sun's rays have begun to filter through the lacy boughs to form moiré patterns on the thinning mist and the great trunks make a latticework of light and dark bands. But the fog is patchy, and sometimes only the tops of the forest giants reach into the low-lying clouds, while elsewhere the road breaks out into bright sunlight, often to plunge again into dark vaulted caverns formed by entwined overreaching boughs.

You enter the peninsula at Olema, where the Seashore headquarters is located, and drive along Tamales Bay, a narrow inlet which lies along the fault, separating the geologic intruder from the established coastline. Soon after passing through Inverness you enter the national seashore, a spectacular world of craggy cliffs, jutting ocean stacks which are home for myriads of seabirds and clinging mussels, bright sandy beaches, many of which do not exist at high tide, and rolling hills and mountains covered with a riot of vegetation. Just across the fault Mount Tamalpais rises to 2,600 feet. Several large dairy ranches, some still operative, which spread their cattle over the grassy hills, green in winter and spring and brown in summer, overlook the various estuaries, presenting such a classic picture of Scotland with its lochs as to suggest the name Inverness to its early settlers.

Formed by the curving point is a protected crescent of blue water, Drake's Bay, where 399 years ago Sir Francis Drake put ashore on our Pacific Coast at Drake's Beach. It and Drake's Estero, up which Drake sailed his Golden Hinde for shelter, are surrounded by 400-foot cliffs rising in front of the coastal range which in the Seashore has elevations of up to 1,400 feet. I had been there three times previously, twice in spring storms, and this time in a winter storm which was two months too early. You may gather it is a stormy place. It is. Last March, the day before one of my visits, a lot of beach washed away, cliffs caved in, and tons of redwood and other logs washed up on the beach—good bonfire material for the entire summer. This time the rain was horizontal and the surf came crashing into the beach—a real November storm in September. But this visit to Drake's Beach was incidental—sort of an afterthought.

For a week the weather in the Bay Area had been gorgeous—blue sky, clear air, temperature in the upper 70s. The fog began moving in the afternoon before, and I set out into a gray morning occasionally misting rain, headed for two places on the north end of the peninsula. I reached Limentour Spit at about 9 AM and walked along that two-mile strip of wide sandy beach with a good breeze at my back and a plunging surf to my left. To my right over the low dunes was an estuary, home for many water birds and recreation for their few hooded, ponchoed watchers. An occasional jogger, and there you have it. Trash cans spaced every 50 feet or so along the back of the beach attest to its popularity on "better" weekends. Whenever you walk down—or up—the beach with the wind at your back, you have it in your face on your return trip, and so I did. By that time it began to ship a little water along with it. I crossed the bird sanctuary, climbed the bank to my car, and headed toward McClure's beach, the wildest and most rugged area on the Seashore.

By the time I reached McClure's Beach, gusts of wind were driving the rain, occasionally mixed with sleet, in swirls and eddies, sometimes almost horizontally. My resolve almost failed, and I nearly turned to head for the city. But I had gone prepared for bad weather—though I was not really prepared mentally for what I found—and after dressing against the storm, I quit the calm of the car and headed out into it. It almost took my breath away.

The footpath down to the beach follows a small stream which winds through a narrow twisting canyon, taking about half a mile or less to fall from the 400-foot elevation of the parking lot. A sudden turn near the cliff's foot thrust up before me one of the most awesome sights imaginable. I am not experienced enough to estimate the height of waves, but the surf was wild beyond the belief of a landlubber. The blowing rain was coming down as billowing, gauzy drapery, waving in and out, up and down. A shallow tidal pool partly filled the wide beige carpet of wet sand between the water and the cliffs, and as I rounded the bend and entered their view, a cloud of water birds acknowledged my presence by noisily ascending into the marbled wet gray sky, slowly settling on broad gray and white wings back to the beach. Caught by the gale, their flight cost them a lot of ground. From then on I was ignored unless I came within just a few feet of them.

The beach, which is almost nonexistent at high tide, is a crescent perhaps a mile wide. At either end where jagged cliffs and sea stacks meet the running, pounding sea, huge plumes of water and spray, caught by the driving wind, billow hundreds of feet up the rock face into the air. The beach is littered with huge logs, some of them two feet or more in diameter. Some are half buried in sand and some of them had been hurled, along with the sand which makes up the back part of the beach, 10 or 15 feet upward to form a steep slope at the cliff's foot, above which the force of the wind and waves has carved the cliffs into irregular bizarre configurations, with many deep depressions and small caves in its reddish-brown face.

Among the more unprofitable discussions currently preoccupying scientists who care about such things are the questions as to whether the whole universe "fell" with Adam, and whether the universe is indeed billions or only thousands of years old. I will not burden you with their arguments pro and con, as they involve this editorial only peripherally. If the universe did change drastically since the coming of man—*homo sapiens*—then we must discount the fossil record and all dating mechanisms and rely on cataclysms—not one but several—to account for the many changes in the earth's crust, including the displacement of Point Reyes. There are responsible, learned geologists and biologists who ably defend this thesis.

I have some problems with it, and I suppose they are mostly negative. In the first place, I don't know what God had in mind for man had man not decided to ignore God and go his own way. We are not told. We are also not told the earth was perfect—only that it was good and that God planted a garden east of Eden, "where there was not yet a man to till the ground." Even there man had to work. God told Adam the ground would bring forth thorns and thistles for man's sake: work is a blessing. He did not say there were not already thorns and thistles outside the garden, and the fossil record indicates there were. It seems to me if there were cataclysms which so greatly disrupted the universe, the Bible and other ancient records would not be silent about it. Lastly, God saw that the creation was very good—good for His purposes, and not necessarily perfect from man's viewpoint.

I take a lot of my vacation a day here and a day there, stuck on one end or the other of business trips, and over the years have managed to

see much of the United States. When you do that, you take it as you find it. It would be nice for everything always to be peachy-keen, I guess—all blue sky and green grass—our conventional picture of Eden. If I had always waited for that, I would have missed seeing a lot of the country, as well as many of my most memorable experiences.

I was prevented by the storm from exploring a lot of McClure's Beach. That had to be postponed for another day. That's the negative side. But on the positive side I wouldn't have missed that wild scene for anything. It is easy I guess for those who have to scratch out a living in the mountains or in the desert or on the wild sea or seacoast to think of the world as "fallen." But the young mother of three active children who were helping her catch the water from the leaking roof at the Drake Beach Visitors' Center snack bar said, "The Point is always different. You never know what you'll find next. We aren't supposed to have storms like this until November. My husband and the rangers are out hunting in this. But we wouldn't live anywhere else."

As I am sure God could have done it either way, the outcome of the argument is not crucial to my faith. I have a feeling that whether one thinks the universe fell with Adam may be more a matter of attitude than theology—unlike man, God doesn't make any cheap junk. The Psalmists said, "When I consider the heavens, the work of thy fingers . . . what is man that thou art mindful of him?" That's the problem. There's nothing wrong with the world that not having man around wouldn't cure. And yet man is the crown of creation. He has been made a little less than God. No wonder the whole universe groans in travail, as St. Paul says, awaiting man's transformation. Fallen man is the earth's curse. The unfallen world is man's blessing. Just as Esau despised his birthright and blessing, so does mankind.

Wouldn't it be dull if everything were always peachy-keen? Think how much we'd miss! Think how much we do miss because we wait for it to be that way.

J.B.T.



Happy
Thanksgiving



Matthew Walker Corrigenda

To the Editor:

Your editorial, "Matthew Walker, M.D., R.I.P.," which appeared in the September number of the *Journal of the Tennessee Medical Association* (*J Tenn Med Assoc* 71:692, 1978) was an appropriate tribute to the memory of a great physician, teacher and humanitarian. I wish, however, to correct two errors which appeared in the editorial: (1) Dr. Walker graduated from Meharry in 1934, not in 1929, and (2) he was not a founding Diplomat of the American Board of Surgery, but was certified by examination in 1946 and is reputed to have tied for first place among all candidates examined that year.

Axel C. Hansen, M.D.

George W. Hubbard Hospital
Meharry Medical College
Nashville, TN 37208



Duane M. Carr, age 76. Died September 22, 1978. Graduate of University of Tennessee School of Medicine. Member of Memphis-Shelby County Medical Society.

T. P. Manigan, age 72. Died August 25, 1978. Graduate of St. Louis University School of Medicine. Member of Memphis-Shelby County Medical Society.

John D. Simpson, Jr., age 53. Died October 2, 1978. Graduate of University of Tennessee School of Medicine. Member of Memphis-Shelby County Medical Society.

Thomas R. Williams, Jr., age 64. Died September 24, 1978. Graduate of University of Tennessee School of Medicine. Member of Consolidated Medical Assembly of West Tennessee.

new members

The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY

Edwin Thomas Hulse, M.D., Ft. Oglethorpe, Ga.
Michael Allan Love, M.D., Chattanooga

DICKSON COUNTY MEDICAL SOCIETY

Clyde E. Collins, M.D., Dickson
Jeffrey Gordon, M.D., Dickson
Marcelle Mahan, M.D., Dickson
Michael G. Marre, M.D., Dickson
Pham Ngoc Thuan, M.D., Dickson

KNOXVILLE ACADEMY OF MEDICINE

Thomas I. Anderson, M.D., Knoxville
Ronald Lee Rimer, M.D., Knoxville

MAURY COUNTY MEDICAL SOCIETY

Robert H. Beaver, M.D., Columbia
Andrew Webb Sisk, M.D., Columbia

McMINN COUNTY MEDICAL SOCIETY

Larry J. Hargis, M.D., Athens

NASHVILLE ACADEMY OF MEDICINE

Roger A. Ganfield, M.D., Nashville
Roland William Gray, M.D., Nashville
David G. Lee, M.D., Nashville
Wendell D. Lovan, M.D., Goodlettsville
Francis Michael Minch, M.D., Nashville
Jack P. Powell, M.D., Nashville
James A. Ramsey, M.D., Nashville
Eric Schendel, M.D., Nashville
Edward H. Withers, M.D., Nashville

ROANE-ANDERSON COUNTY MEDICAL SOCIETY

Elaine Marie Bonick, M.D., Oak Ridge

SULLIVAN-JOHNSON COUNTY MEDICAL SOCIETY

C. Robert Bice, Jr., M.D., Kingsport

WASHINGTON-CARTER-UNICOI COUNTY MEDICAL ASSOCIATION

J. Thomas Miceli, M.D., Johnson City

personal news

John S. Derryberry, M.D., Shelbyville, was elected president-elect of the American Academy of Family Physicians at the 30th annual meeting of its Congress in San Francisco. Dr. Derryberry will assume the presidency of the group in 1980.

A. L. Jenkins, M.D., Knoxville, was awarded a commendation from the American College of Emergency Physicians, recognizing his contributions to the national certification examination in emergency medicine. Dr. Jenkins and 29 colleagues wrote the test questions and developed aspects of practice which were simulated.

Ho Kyun Kim, M.D., Tullahoma, has been elected to Fellowship in the American Academy of Pediatrics.

Edward T. Newell, M.D., Chattanooga, was presented the Tennessee Hospital Association's Meritorious Service Award at the association's 40th annual meeting in Nashville. Dr. Newell was cited for his work in guiding the renovation and expansion of

Downtown General Hospital to better serve the medical needs of downtown Chattanooga.

Frank M. Valentine, Jr., M.D., Newport, has been elected chief of staff at Cocke County Memorial Hospital.

R. B. Wilson, M.D., Huntingdon, was honored at an Appreciation Day dinner in his name. Various civic organizations of Huntingdon and Clarksburg sponsored the event to recognize Dr. Wilson for medical services rendered to many Carroll Countians and others in surrounding areas.

Robert E. Wilson, M.D., Kingston, has been elected chief of staff at Chamberlain Memorial Hospital for the second consecutive year.

Thomas B. Zerfoss, Jr., M.D., Nashville, has been elected a member of the executive council of the Society for Adolescent Medicine.

programs and news of medical societies

Knoxville Academy of Medicine

Over 240 members and their wives attended the Knoxville Academy of Medicine regular membership meeting on Sept. 19 at the Hyatt Regency, Knoxville. The guest speaker, Dr. Tom E. Nesbitt of Nashville, president of the American Medical Association, suggested that physicians should lead the nation in a voluntary cost containment program. He also reviewed the AMA's legislative efforts—the battles won and lost and some of the plans for future AMA legislation.

Some of the guests at the meeting were Dr. Frank Bowyer, president of the American Dental Association; Dr. John B. Dorian, president of the TMA; and Dr. George Holcomb, chairman of the TMA Board of Trustees.

Maury County Medical Society

The Maury County Medical Society held its annual banquet on Oct. 6 at the home of Dr. & Mrs. J.P.W. Brown, in Columbia. The banquet, a New Orleans buffet, was attended by 39 members, 40 guests of the society, and 78 guests of members.

Mrs. Elizabeth Erwin, R.T., and the Maury County Hospital Radiology Department presented the scientific program and exhibit on obstetrical, abdominal, renal, and cardiac diagnostic ultrasound.

Dr. Tom Dake, president, presided over the business meeting and was presented a ceremonial gavel by Dr. John Orlando Williams, Jr., in appreciation for his leadership.

Dr. Joel Hargrove, chairman of the board of censors, announced approval of five new members.

Tennessee Valley Medical Assembly

The Tennessee Valley Medical Assembly held its annual meeting Sept. 12 at the Chattanooga Choo

Choo Inn. Approximately 150 doctors who attended the meeting heard the guest speaker, Dr. Tom Nesbitt of Nashville, president of the AMA, encourage physicians to hold down the rate of escalation of medical care costs by voluntarily not increasing fees more than the general inflation rate. Dr. Nesbitt also reviewed the AMA's legislative status—past, present, and future.

medical news in tennessee

Voluntary Agency for Blindness Prevention Established for State

A new Tennessee Society to Prevent Blindness was formed Sept. 28, 1978, according to announcement by Russell L. Wagner, chairman of the board of the National Life and Accident Insurance Company, who was elected president of the new organization's board of directors.

The Tennessee Society, which is affiliated with the 70-year-old National Society to Prevent Blindness, will bring together volunteers—both laymen and professionals—to conduct programs directed at eye health and safety through public and professional education, community service and research support.

Tennessee is higher in rates of blindness than the national average. In 1976, there were 242.7 blind per 100,000 population in this state, as against 225.1 for the nation. Approximately 950 Tennesseans lost their sight. Half of them could have been spared, since the knowledge and techniques to prevent 50% of all blindness already exist.

national news

From the AMA's Office in Washington, D.C.

Complaints over the discontinuation of the National News have prompted the AMA Washington Office to resume this feature, which we are again pleased to carry for our readers.—ED

Health Legislation Still Bottled Up

Most of the 95th Congress' major health legislation is still bottled up in the adjournment traffic jam. Waiting in line for final action are bills concerned with hospital cost containment, disease prevention, Health, Education and Welfare Department appropriations, overhaul of drug laws, clinical laboratories, extension of the health maintenance program (HMOs), the new child health Medicare program, extension of the Health Planning Law, amendments to the Professional Standards Review Or-

ganization (PSRO) program, and amendments to the Medicare Law.

Most of the bills are expected in some shape and form to become law, but a few may lose out in the hectic stampede of members to go home and hit the hustings.

Most attention centers upon the administration's heavy-weight effort in the Senate to secure hospital cost containment legislation. Abandoned in the House and down and being counted out in the Senate, the President and HEW Secretary Joseph Califano have rallied their forces for a last attempt to secure the controversial legislation at least in the Senate before adjournment.

The administration has been forced to support a "compromise" plan that would allow the Voluntary Effort to continue with federal controls triggered only if the private sector fails to brake cost rises. The original administration plan was for immediate, mandatory federal "caps."

The "trigger" control plan is slated to be offered as an amendment to an important Medicare-Medic-aid hospital reimbursement measure approved by the Senate Finance Committee. The vote is expected to be close. Should the administration succeed in its uphill Senate fight, the remaining hurdle of the House appears too high to clear before adjournment.

AMA Testifies on Psychotropic Drug Prescribing

The AMA has told Congress strict enforcement of the law should apply to the small number of physicians who prescribe psychotropic drugs solely for profit. At the same time, the lawmakers were cautioned not to take action that would restrict the physicians' armamentarium "in order to correct the abuses of a few."

Joseph F. Boyle, M.D., a member of the AMA Board of Trustees, told the House Select Committee on Narcotics Abuse and Control that "when poor prescribing practices are a problem, we believe corrective measures can be taken through information distribution and continuing medical education." Dr. Boyle said "it cannot be emphasized enough that statistics regarding the amount of a drug prescribed or the number of prescriptions written cannot be used to document so-called misprescribing of drugs in medical practice."

There are no data, for instance, on how many people suffer from severe anxiety symptoms, Dr. Boyle noted. Increased access to care through federal medical programs, community treatment of mental illness, greater awareness of the need to seek medical help for mental conditions—all could play a role in higher than expected use of psychotropic drugs, he said.

It is undeniable that there are certain problems in the prescribing of certain psychotropic drugs, Dr. Boyle testified. "These problems include any blatant misuse of the trust granted to physicians by a small group of physicians who prescribe these drugs solely for profit. When it can be established that a phy-

sician or other prescriber is prescribing or dispensing drugs for nonmedical uses, appropriate actions should be taken to halt such activity. We support strict enforcement of the law."

The AMA has developed model state legislation providing for disciplinary actions against physicians found guilty of specified infractions, including "unprofessional conduct." Most state medical practice acts include within the definition of unprofessional conduct the prescribing and/or administering of certain types of drugs in a nontherapeutic or unprofessional manner, Dr. Boyle noted.

He said the AMA "supports efforts designed to eliminate improper prescribing, and we believe the principal means for achieving such a result is to provide unbiased, valid and current information to physicians on the risks and benefits of particular drugs in various treatment situations." However, "we caution against any federal action that could, in effect, reduce the availability of patient treatment by restricting the physician's armamentarium to treat illness and injury in order to correct the abuses of a few."

The second AMA witness was Daniel X. Freedman, M.D., chairman and professor of Psychiatry at the University of Chicago and chief editor of the *Archives of General Psychiatry* of the AMA.

Dr. Freedman said that "although the benzodiazepines do have a potential for abuse and dependence differing from that of antipsychotic and antidepressant drugs, their relative safety in terms of therapeutic doses and toxic effects provides an advantage over the barbiturates."

The number of prescriptions for all benzodiazepines has plateaued while prescriptions for barbiturates and related drugs have decreased, he noted. The benzodiazepines have actions other than anti-insomnia and antianxiety, which accounts for their use in selective amnesia and intravenous anesthesia, spasticity, local skeletal muscle spasm, certain dyskinesias, and treatment of seizures, the witness said.

"Moreover, a substantial percentage of the prescriptions for benzodiazepines are not for a primary complaint of anxiety or insomnia but for these conditions in conjunction with episodes of other illnesses."

"The wider use of these drugs by women is a transnational trend and may in part be explained by their greater utilization of the health care system and their willingness to seek help sooner than men for all primary care problems," said Dr. Freedman, "although their changing role in society which likely heightens anxiety may also be a contributing factor."

Squabble Slows HCFA

The first top-level health official of the Carter administration to topple is Robert Derzon, ousted as head of the stripling Health Care Financing Administration (HCFA), the new agency that operates Medicare and Medicaid.

Derzon fell out with HEW Secretary Califano in

disputes over policy and organizational matters. Derzon wasn't moving fast enough to whip HCFA into shape, Califano believed. Derzon, 47, a hospital administrator, took issue with the belligerent attitude of Califano toward health providers.

Califano has been under pressure from Congress to get HCFA moving. The agency was originally the idea of the Senate Finance Committee and was embodied in proposed legislation. Califano preempted the plan and made the sweeping organizational shift 18 months ago. Medicare had been under Social Security; Medicaid under HEW's Welfare Division.

Derzon was a soft-spoken official who never quarreled with his boss in public. He had been administrator of the University of California-San Francisco Hospitals and Clinics. Named to succeed him was Leonard D. Schaeffer, currently Assistant HEW Secretary for Management and Budget. Schaeffer, 33, was director of the Bureau of Budget of the State of Illinois for 18 months, beginning in 1975, and deputy director for Management of the Illinois Department of Mental Health and Developmental Disabilities for the two preceding years. Before joining HEW nine months ago, he had served as a vice president for Financial and Business Planning at Citibank in New York.

Blues to Reimburse for "Second Opinion"

Twenty-seven Blue Cross and Blue Shield plans will reimburse for second opinions on the need for elective surgery recommended by physicians. "Many more plans" are expected to be involved in second opinion surgery programs in the near future, Blue Cross-Blue Shield reported.

Under the program, all charges related to the second opinion, including the consulting specialist's fees, x-rays and laboratory tests, are covered by the plans. If the second opinion differs from the first, some plans pay for a third opinion to help the subscriber decide whether or not to have surgery.

Walter J. McNerney, president of the Blue Cross and Blue Shield Associations, said a major purpose of the presurgical consultation programs is to determine the extent to which an additional independent opinion results in significant savings or improvement of patient care by reducing the incidence of elective surgery.

The Blues released the statement on second opinions to coincide with the scheduled official launching of HEW's second opinion program for Medicare and Medicaid. The government plans an extensive publicity campaign to encourage the public to seek second opinions when suitable.

In comment upon the HEW program James H. Sammons, M.D., AMA Executive Vice President, commented: "The concept of second opinions is not new to the medical profession. The AMA has for years supported voluntary consultation. The Association's Principles of Medical Ethics specifically state that, 'A physician should seek consultation

upon request; in doubtful or difficult cases; or whenever it appears that the quality of medical service may be enhanced thereby.'

"The Department of HEW claims that its national second opinion program will be cost reducing. However, such a program promises to increase utilization of physician services as Medicare and Medicaid patients across the country are urged to seek a second opinion before all nonemergency surgery. Short-term results of several experimental second opinion programs have not provided clear evidence that a national program of this type will either improve the quality of care or reduce health costs."

New Financial Disclosure Rules Proposed

New financial disclosure rules have been proposed for providers under Medicaid, Medicare and the Maternal and Child Health Program.

The rules require private institutions, organizations, and agencies providing health-related services to beneficiaries of these programs to disclose ownership and other business-related information.

"These rules would give us an important new tool with which to ferret out evidence of fraud and abuse in those important programs and prosecute offenders," HEW Secretary Califano said.

"They will help us identify situations in which self-dealing, interlocking directorates or other arrangements allow providers to make excessive profits. In addition, the existence of this requirement will serve as a deterrent to those who would use obscure business arrangements to defraud the taxpayers," he said.

Three major new requirements were proposed. Any organization providing services must disclose to HEW the identity of persons with certain ownership or control interests in the organization, or in a subcontractor. These organizations, except for those which deal exclusively with the Maternal and Child Health Program, must also disclose information on certain business transactions.

HEW Endorses Disease Classification System

A new disease classification system for use in hospitals and related clinical settings has been endorsed by HEW. Starting next year, the system will be required in HEW-financed programs such as Medicare, the Professional Standards Review Organization program and the Cooperative Health Statistics System.

The new system, called the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), will be used to coordinate statistics on health problems and health care in hospitals and similar institutional environments. The statistical reports and analyses produced will be used for many purposes including quality assurance, health planning and research.

ICD-9-CM contains over 10,000 five-digit diag-

nostic codes and more than 3,000 four-digit medical procedure codes. HEW said the system is compatible with the existing international classification of diseases, ninth revision, produced by the World Health Organization, "and provides a significant improvement over the classification systems now in use in the United States."

Currently, the two major disease classification systems being used throughout the nation are the ICDA-8 and HICDA-2 systems. According to HEW officials, the use of these competing classification systems has made standardization of statistics difficult to accomplish. HEW officials said the universal adoption of the ICD-9-CM as a simple system would eliminate these problems and that its use would represent a major technical advance in recording health statistics.

HEW has entered into a contract with the Commission on Professional and Hospital Activities (CPHA) to produce adjunct materials necessary for the implementation of this system.

A federal draft guide of pharmacy prescription drug prices intended for physicians has been labeled "extremely misleading" by the Pharmaceutical Manufacturers Association (PMA).

"Truly relevant data could be a useful adjunct to existing information sources, but we do not believe that this particular model meets this standard," PMA President C. Joseph Stetler said in a letter to the HEW Department.

The PMA said the price book could cause confusion "as pharmacists undertake to make prescribers and consumers understand why their prescriptions do not cost what this book seems to say they should."

HEW used pharmacy acquisition cost data as a base "even though average retail treatment cost information would be less misleading and is readily available," said Stetler.

"Those data . . . exaggerate the differentials to be found in the actual prescription market, whether between the average prices and treatment of different drugs or of different versions of the same drug," he said. And—"manufacturers often provide pharmacists with labor reducing unit-of-use packaging, special purchasing discounts, and services such as a return goods policy allowing inventory reductions and comprehensive product liability coverage—all of which reduce costs."

PMA compared examples of price ratios from the HEW Guide to Average Retail Price Ratios for Typical Prescriptions which it said "clearly showed that the book's price differences were exaggerated."

Drug Expiration Date Required

The Food and Drug Administration will require that most drugs be labeled to specify the date after which they should not be used.

FDA Commissioner Donald Kennedy said the expiration dating requirement—which will cover all prescription drugs and most nonprescription drugs—should "provide a new protection for consumers, who will have further assurances that the drugs they

purchase retain their quality."

Under the old rules, expiration dates were required only for drugs which were "liable to deterioration" such as antibiotics.

Government Patent Policy Hit

New drugs and medical devices developed with federal aid are "wasting away on the shelves of bureaucrats" due to government patent policies, a group of senators have charged.

Sens. Robert Dole (R-Kans.) and Birch Bayh (D-Ind.) have introduced legislation to encourage the government to allow universities, nonprofit organizations and small businesses limited patent protection to market discoveries they have made under federal auspices. The patent holder would reimburse the government out of royalties and income for federal research expenditures.

Joining Dole and Bayh were Sens. Charles Mathias (R-Md.), Dennis Deconcini (D-Ariz.), and Orrin Hatch (R-Utah).

Dole said that "the present government policy mandates the government take title to all inventions it has had a hand in funding. The policy discourages participation by the private sector, with the end result being that the innovation will never be brought to the marketplace for use by the public."

announcements

CALENDAR OF MEETINGS

NATIONAL 1978

- | | |
|--------------------|--|
| Nov. 29-
Dec. 3 | Southeastern Conference on Alcohol and Drug Addiction—Marriott Hotel Downtown, Atlanta |
| Dec. 1-3 | American Academy of Psychoanalysis, Springs Spa Hotel, Palm Springs, Calif. |
| Dec. 2-7 | American Academy of Dermatology, San Francisco Hilton, San Francisco |
| Dec. 13-17 | American Psychoanalytic Association, Waldorf Astoria, New York. |

1979

- | | |
|------------|---|
| Jan. 14-19 | American Society of Contemporary Medicine and Surgery—Caesar's Palace, Las Vegas |
| Jan. 14-19 | American Society of Contemporary Ophthalmology—Caesar's Palace, Las Vegas |
| Jan. 15-16 | International Glaucoma Congress—Caesar's Palace, Las Vegas |
| Jan. 15-16 | International Congress of Cardiovascular Disease and Surgery—Caesar's Palace, Las Vegas |
| Jan. 15-17 | Society of Thoracic Surgeons—Hyatt & Adams Hotel, Phoenix, Ariz. |

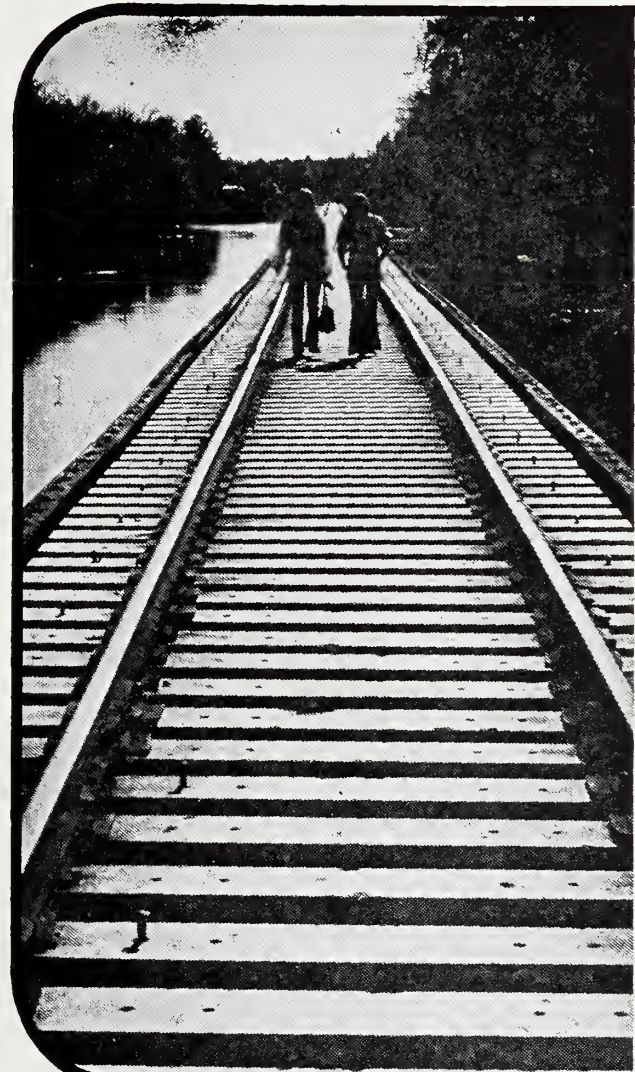
- Jan. 20-26 American Society of Clinical Pathologists—Phoenix, Ariz.
- Jan. 22-26 Southern Clinical Neurological Society—Pier 66 Hotel, Ft. Lauderdale, Fla.
- Jan. 25-27 Forensic Medicine and Society (sponsored by American Society of Law and Medicine)—Hotel del Coronado, San Diego
- Jan. 27-31 American College of Allergists—San Francisco
- Jan. 28-31 American Association for Hand Surgery—Stowe, Vt.

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CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. **Drug Dependence:** Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. **Use in Pregnancy:** Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. **Use in Children:** Tenuate is not recommended for use in children under 12 years of age.

PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

ADVERSE REACTIONS: *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System:* Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria, rash, ecchymosis, erythema. *Endocrine:* Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System:* Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous:* A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in mid-evening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in mid-morning. Tenuate is not recommended for use in children under 12 years of age.

OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633

Direct Medical Inquiries to:

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

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References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M.: A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

Merrell

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The continuing medical education accreditation program of the TMA has full approval by the Liaison Committee on Continuing Medical Education. An accredited institution or organization may designate for Category 1 credit toward the AMA Physician's Recognition Award those CME activities that meet appropriate guidelines. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Ave., Nashville, TN 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

IN TENNESSEE

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman, can plan an individualized program of one to four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, ward rounds, learning individual procedures, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

Participating Departments and Divisions

Allergy & Immunology	Samuel Marney, M.D.
Anesthesiology	Bradley E. Smith, M.D.
Cardiology	Gottlieb C. Friesinger, III, M.D.
Chest Diseases	James D. Snell, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Dermatology	Lloyd King, M.D.
Diabetes	Oscar B. Crofford, M.D.
Endocrinology	David Rabin, M.D. David N. Orth, M.D.
Gastroenterology	Steven Schenker, M.D.
General Internal Medicine	W. Anderson Spickard, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.
Medicine	Grant W. Liddle, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Oncology	Robert Oldham, M.D.
Orthopedics	Paul W. Griffin, M.D.
Pathology	William H. Hartmann, M.D.
Pediatrics	David T. Karzon, M.D.

Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Everette James, Jr., Sc.M., J.D., M.D.
Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sergeant, M.D.
Surgery	
Cancer Chemotherapy	Vernon H. Reynolds, M.D.
General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neill, M.D.
Plastic	John B. Lynch, M.D.
Renal Transplantation	Robert E. Richie, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.

Eligibility: All licensed physicians are eligible.

Administrative Fee: \$200.00 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1) and American Academy of Family Physician's Continuing Education accreditation.

Application: For further information and application, contact: Paul E. Slaton, M.D., Director, Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

Continuing Education Schedule

October, 1978	William F. Orr Lectureship in Psychiatry
Oct. 31- Nov. 4	7th Annual Rhamy & Shelley Lectureship in Urology (16 hours)
Nov. 9-10	Symposium on Marital Therapy
Nov. 30- Dec. 1	American College of Physicians Regional Meeting
Dec. 1-2	High Risk Obstetrical Seminar (11 hours)
Jan. 20-21	Comparative Leukemia Conference
Feb. 14-15	1st Annual Harry S. Abram Memorial Symposium on Medical Ethics
March 3	Sports Medicine (cosponsored with Nashville Academy of Medicine)
Spring, 1979	Annual L. W. Edwards Memorial Lecture in Surgery (1 hour)
Spring, 1979	2nd Annual Family Therapy Symposium
April 2-6	8th Annual James C. Overall Visiting Professor in Pediatrics
April 4-6	Management of Hypertension and Cardiac Emergencies (or Sudden Death) (21 hours)
April 13-14	3rd Annual Gynecological Oncology Course (10 hours)
April 20	Annual Barney Brooks Lectureship in Surgery (1 hour)
April 26	Annual Frank H. Luton Lecture in Psychiatry (1 hour)

- April 27 American Academy of Orthopedic Surgeons Short Course—Hyatt Regency (7 hours)
- April, 1979 Modern Concepts in Oncology
- May 23-24 18th Annual Seminar in Psychiatry (for nonpsychiatrists) (11 hours)
- May, 1979 Scientific Sessions of the Vanderbilt Medical Alumni Reunion
- June 11-16 Family Practice Intensive Review (40 hours)
- July 25-29 2nd Annual Symposium on Contemporary Clinical Neurology (16 hours)
- August-October Internal Medicine Intensive Review (33 hours)
- For information contact: Vanderbilt Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

MEHARRY MEDICAL COLLEGE SCHOOL OF MEDICINE

Extended Continuing Education Program

Arrangements have been made with the following services and departments in the medical school to allow practicing physicians to participate in that service's activities for a period of one to four weeks. This program provides an opportunity for physicians to study in depth for a specified period. The schedule of activities is individualized in response to the physician's request by the participating department. The experience includes conferences, ward rounds, audiovisual materials and contact with patients, residents and faculty.

Participating Departments

Anesthesiology	Ramon S. Harris, M.D.
Family Practice	John Arradondo, M.D.
Internal Medicine	
Cardiology	John Thomas, M.D. Kermit R. Brown, M.D. Qamar A. Kahn, M.D.
Chest Disease	Joseph M. Stinson, M.D. Paul A. Talley, M.D. Edward A. Mays, M.D.
Dermatology	Thomas W. Johnson, M.D. David Horowitz, M.D.
Gastroenterology	Ludwald O. P. Perry, M.D. Buntwal M. Somayaji, M.D.
General Medicine	Edward A. Mays, M.D.
Hematology/Oncology	Robert S. Hardy, M.D.
Neurology	Calvin L. Calhoun, Sr., M.D. Gregory Samaras, M.D.
Obstetrics & Gynecology	Henry W. Foster, M.D.
Ophthalmology	Axel C. Hansen, M.D.
Orthopedics	Wallace T. Dooley, M.D.
Pathology	Louis D. Green, M.D. John C. Ashhurst, M.D.
Pediatrics	E. Perry Crump, M.D.
Surgery	
General	Louis J. Bernard, M.D.
Neurological	Charles E. Brown, M.D.
Thoracic and Cardiovascular	David B. Todd, M.D. Ira D. Thompson, M.D.
Urology	Marcelle R. Hamberg, M.D.

Fee: \$100 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1), American Aca-

demy of Family Physicians Continuing Education Accreditation and Continuing Education Units by Meharry Medical College.

Application: For further information contact Frank A. Perry, Sr., M.D., Director, Continuing Education, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

Continuing Education Schedule

- April 19-22 Matthew Walker Surgical Symposium—Hale McMillan Lecture (24 hours)
- May 23-25 Internal Medicine—1979 (18 hours)
- For information contact Frank A. Perry, Sr., M.D., Director of CME, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

UNIVERSITY OF TENNESSEE CENTER FOR THE HEALTH SCIENCES

Continuing Education Schedule

This comprehensive listing of UTCHS courses includes programs of the Chattanooga, Knoxville, and Memphis units. The codes (C), (K), and (M) indicate the continuing education unit handling the arrangements for a particular program.

- Nov. 21- (C) 3rd Annual Perinatal Circuit
Dec. 6 Course (5.5 hours each)
- Nov. 21 Copper Basin Hospital, Copper Hill
- Nov. 28 Bradley Memorial Hospital, Cleveland
- Nov. 29 South Pittsburgh Municipal Hospital, South Pittsburgh
- Dec. 5 Athens Community Hospital, Athens
- Dec. 6 Rhea County Medical Center, Dayton
- Nov. 30- (C) Nephrology-Urology Update
Dec. 1
- Dec. 2-3 (C) Glaucoma: Diagnosis and Management (9 hours)
- Dec. 8-9 (M) Otolaryngology for the Primary Care Physician (9 hours)
- Dec. 26- (C) Medicine Update '79—Hawaii
Jan. 2 —Departing from Chattanooga (15 hours)

1979

- Jan. 13-20 (K) The Female Patient—Vail, Colo. (20 hours)
- Jan. 25-26 (C) Allergies in Clinical Perspective
- Feb. 3-10 (K) Family Practice Review & Update—Caribbean Cruise—Departing from New Orleans with stop in Havana (15 hours)
- Feb. 7-9 (M) Gynecologic Urology
- Feb. 9-10 (M) Human Performance & Cardiovascular Health

- Feb. 12-13 (M) Practical Office Dermatology
- Feb. 23-24 (C) Gut Problems: A Clinical Approach—St. Petersburg, Fla. (Tierra Verde) (12 hours)
- March 12-15 (C) Diagnostic Radiology for the Primary Care Physician—Sahara Tahoe, Stateline, Nev.
- March 18-24 (M) Review Course for Family Physicians
- March 29-30 (C) Pediatrics
- April 7-14 (C) Infectious Disease for the Clinician — Caribbean Cruise — Departing from Montego Bay
- April 16 (M) Modern Approach to Hypertension
- April 26-27 (C) Orthopaedics
- April 26-27 (M) Pediatrics—Behavioral and Learning Disabilities
- May 4-5 (K) 2nd Annual Family Practice Update and Review—Gatlinburg
- May 7-9 (M) 4th Annual Symposium on Reproductive Medicine
- May 10-11 (C) Rheumatology in a Clinical Practice—Gatlinburg
- May 11-12 (M) Modern Advances in Cancer Treatment
- May 17-19 (M) Practical Otolaryngology for the Primary Care Physician—Gatlinburg
- June 6-9 (M) Basic Electrocardiography—Pickwick
- June 7-10 (C) Family Practice Review Course
- June 11-14 (M) Fundamental Principles of Rhinoplasty
- June 25-28 (C) OB/GYN Emergencies—Orlando, Fla.
- Aug. 23-25 (M) ENT Postgraduate Review

For further information about any of these courses, please call the appropriate individuals below:

- (C) Mr. LeRoy J. Pickles, Chattanooga, Tel. (615) 756-3370
- (K) Dr. Harvey L. Goodman, Knoxville, Tel. (615) 971-3345
- (M) Ms. Grace Wagner, Memphis, Tel. (901) 528-5547

or, write or telephone:

Dennis K. Wentz, M.D.
Director of Continuing Education
University of Tennessee Center for
the Health Sciences
62 S. Dunlap St.
Memphis, TN 38163
Tel. (901) 528-5605

EAST TENNESSEE STATE UNIVERSITY

Continuing Education Schedule

- Dec. 11-12 Southern Appalachia Regional Health
- Jan. 12 Stress and the Physician
- Feb. 6 Occupational Medicine

For information contact Dr. Charles F. Johnson, Assistant Dean, East Tennessee State University, College of Medicine, Dept. of Continuing Medical Education, Johnson City, TN 37601, Tel. (615) 929-5364.

IN SURROUNDING STATES

UNIVERSITY OF KENTUCKY

Mini-Residencies for Medical and Surgical Practitioners in Office Management Of Emotional Problems

The objective of this course is to give physicians an ideal emotional counseling technique that fits busy office practices. The technique uses a concept of emotions that is consistent with human anatomy and psycho-physiology. Yet, the technique requires no more physician time or patient cost than routine evaluations of new patients. Finally, the technique is readily understandable and easy for practitioners to apply.

One, two and three week courses. Minimum of 40 hours per week. *Tuition Fee:* \$350 per week for the 1st & 2nd week of training; \$500 for 3rd week of supervised practice with patients in the Intensive RBT Treatment Program.

For further information contact: Maxie C. Maultsby, Jr., M.D., Office of Continuing Medical Education, Dept. of RBT, University of Kentucky, Lexington, KY 40506.

Continuing Education Schedule

- Dec. 1-2 Fiberoptic Bronchoscopy: A Workshop —University of Kentucky Medical Center, Lexington. *Credit:* 13 hours AMA Category 1. *Fee:* \$300.
- Dec. 10-15 9th Family Medicine Review (Session III)—Hyatt Regency Hotel, Lexington, Ky. *Credit:* 50 hours AMA Category 1 and AAFP. *Fee:* \$295.

For information contact Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, KY 40506, Tel. (606) 233-5161.

BOWMAN GRAY SCHOOL OF MEDICINE

Courses in Ultrasound

Three eight-week courses in sonic medicine will be offered at Bowman Gray School of Medicine on the following dates: Jan. 8-March 2, 1979; and April 2-May 25, 1979.

Credit: 30 hours per week in AMA Category 1. Three additional two-day real time courses are offered for obstetricians on Sept. 14-15, 1978; Nov. 16-17, 1978; and March 8-9, 1979. *Credit:* 10 hours per day in AMA Category 1.

Courses in Abdominal Real Time Sonography

A series of six week-long courses on the use of real time ultrasound in abdominal studies will be offered at Bowman Gray School of Medicine on the following dates: Dec. 4-8, 1978; March 12-16, June 11-15, July 16-20, Aug. 6-10, and Dec. 9-13, 1979. *Credit:* 30 hours per week in AMA Category 1.

For information contact James F. Martin, M.D., Director, Center for Medical Ultrasound, Bowman Gray School of Medicine, Winston-Salem NC 27103.

MEDICAL COLLEGE OF GEORGIA

Continuing Education Schedule

Dec. 7-8	Family Dynamics
Feb. 8-9	Clinical Psychiatry
March 6-9	Emergency Medicine—Tamarron Ski Resort, Colorado
March 15-16	Reproductive Endocrinology
March 19-21	Neurologic Disorders
March 26-28	Ophthalmology*
April 4-6	Cardiology
April 19-20	Preventive Medicine
May 10-11	The Medical Office Team
June 7-9	Internal Medicine*
July 16-20	Taxes and Investments*
Aug. 6-8	Pediatrics*

*Presented at Holiday Inn of Jekyll Island, Ga.

For information contact Division of Continuing Education, Medical College of Georgia, Augusta, GA 30901, Tel. (404) 828-3967.

OF SPECIAL INTEREST

AMERICAN COLLEGE OF PHYSICIANS

A comprehensive schedule of continuing medical education activities for a 12-month period beginning in September, 1978, includes regional meetings and postgraduate courses to be held at various locations throughout the United States and Canada.

The ACP Regional Meetings, lasting one to four days, are designed for practicing internists and physicians in related fields. They bring new developments in the basic sciences and clinical medicine from major research centers to internists who are unable to travel to medical meetings outside of their state, and also provide a vehicle for local physicians to report to their colleagues on investigative work and clinical experiences in the wide scope of subject areas included in the practice of internal medicine.

The ACP Postgraduate Courses provide the opportunity for in-depth study in fields covered by internal medicine and its subspecialties. Averaging three to five days, they are directed toward practicing physicians and are presented in association with medical schools and other teaching institutions.

For information and registration contact: Registrar, Postgraduate Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

Regional Meetings

See September 1978 issue for complete 1978-1979 listing

Postgraduate Courses

See September 1978 issue for complete 1978-1979 listing

Dec. 4-8	Fluid and Electrolyte Balance, Hypertension and Renal Diseases—Chicago
Jan. 11-13	Recent Advances in Gastroenterology—Little Rock, Ark.
Jan. 22-26	Present Concepts in Internal Medicine—San Francisco
Jan. 29-Feb. 2	5th Stanford-Palo Alto Medical Research Foundation Winter Course in Infectious Diseases, Keystone, Colo.

BETH ISRAEL HOSPITAL

Denver, Colorado

See September 1978 issue for listing

ESTES PARK INSTITUTE

The Estes Park Institute, a non-profit educational organization, will sponsor Hospital Medical Staff Conferences and Hospital Trustee Forums at the dates and locations below. *Credit:* 30 hours AMA Category 1 (each location). *Fee:* \$190.

Dec. 3-7	Clearwater Beach, Florida
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For information contact Estes Park Institute, P.O. Box 400, Englewood, CO 80151, Tel. (303) 761-7709.

AMERICAN LUNG ASSOCIATION OF LOUISIANA

Dec. 12-16	4th Annual New Orleans International SUPERCOURSE (c) on Lung Disease—Hyatt Regency, New Orleans. <i>Credit:</i> AMA Category 1.
Dec. 12-16	11th Annual Postgraduate Course on "Newer Concepts of Care for Patients with Respiratory Disease" [in conjunction with SUPERCOURSE (c)]
Dec. 13-16	15th Annual Postgraduate Course on "Pulmonary Function in Health & Disease" [in conjunction with SUPERCOURSE (c)]

Dec. 13-16 8th Annual "Pediatric Pulmonary Course" [in conjunction with SUPERCOURSE (c)]

For information contact Howard A. Buechner, M.D., SUPERCOURSE Chairman, American Lung Association of La., Suite 500, 333 St. Charles Ave., New Orleans, LA 70130.

ALBANY MEDICAL COLLEGE

Jan. 4-17 20th Anniversary Cruise — aboard Queen Elizabeth 2 to Martinique, Barbados, Grenada, LaGuaira, St. Thomas, and Nassau, departing from New York and Norfolk. Faculty from medicine, psychiatry, surgery, and cardiology. *Credit: 34.5 hours AMA Category 1.*

For information contact Frank M. Woolsey, Jr., M.D., Department of Postgraduate Medicine, Albany Medical College, Albany, NY 12208.

UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON

Jan. 26-27 Radiology of the Acutely Ill and Injured Patient—Update 1979—Stouffer's Hotel, Greenway Plaza, Houston. *Credit: 14 hours AMA Category 1; ACEP and AAFP applied for. Fee: \$150.*

For information contact Division of Continuing Education, University of Texas Health Science Center at Houston, P.O. Box 20367, Houston, TX 77025, Tel. (713) 792-4671.

UNIVERSITY OF MIAMI

Jan. 29- Feb. 2 6th Annual Neurological Update Symposium—Konover Hotel, Miami Beach. *Credit: 6, 24, or 30 hours AMA Category 1.*

For information contact Division of Continuing Medical Education D23-3, University of Miami School of Medicine, P.O. Box 016960, Miami, FL 33101, Tel. (305) 547-6716.

DUKE UNIVERSITY MEDICAL CENTER

Feb. 12-16 Current Concepts in Diagnostic Radiology including Ultrasound & CT Scanning—Acapulco Princess Hotel, Mexico. *Credit: 30 hours AMA Category 1. Fee: physicians, \$250; in training, \$125.*

For information contact Robert McLelland, M.D., Radiology—Box 3808, Duke University Medical Center, Durham, NC 27710, Tel. (919) 684-4397.

PEDIATRIC DERMATOLOGY SEMINAR

Feb. 17-25 6th Annual Pediatric Dermatology Seminar—cruise aboard the M/V Buccaneer in the Galapagos Islands. *Credit: AMA Category 1.*

For information contact Guinter Kahn, M.D., 16800 N.W. 2nd Ave., N. Miami Beach, FL 33169.

NETWORK FOR CONTINUING MEDICAL EDUCATION

Schedule for Upcoming Programs

Nov. 27- Dec. 10 Cardiac Auscultation—with John F. Stapleton, M.D., and Antonio C. de Leon, Jr., M.D., Georgetown University School of Medicine and Rafael C. Sanchez, M.D., Washington-St. Tammany Charity Hospital, Bogalusa, La.

Dec. 11-24 Chest Radiographs: Normal and its Variations—and—Pleural Fluid—with Anthony V. Proto, M.D., University of Cincinnati College of Medicine, Cincinnati, Ohio.

Penetrating Wounds of the Abdomen: When to Operate—with John Hansbrough, M.D., and Ben Eiseman, M.D., University of Colorado Medical Center, Denver.

TENNESSEE MEDICAL ASSOCIATION

144TH ANNUAL MEETING

April 4-7, 1979

Airport Hilton Inn, Memphis, Tennessee

HILL CREST HOSPITAL

*For Intensive Treatment
of Psychiatric Disorders*

MEDICAL DIRECTOR:
James K. Ward, M.D.

ADMINISTRATOR:
Robert V. Sanders

HILL CREST HOSPITAL

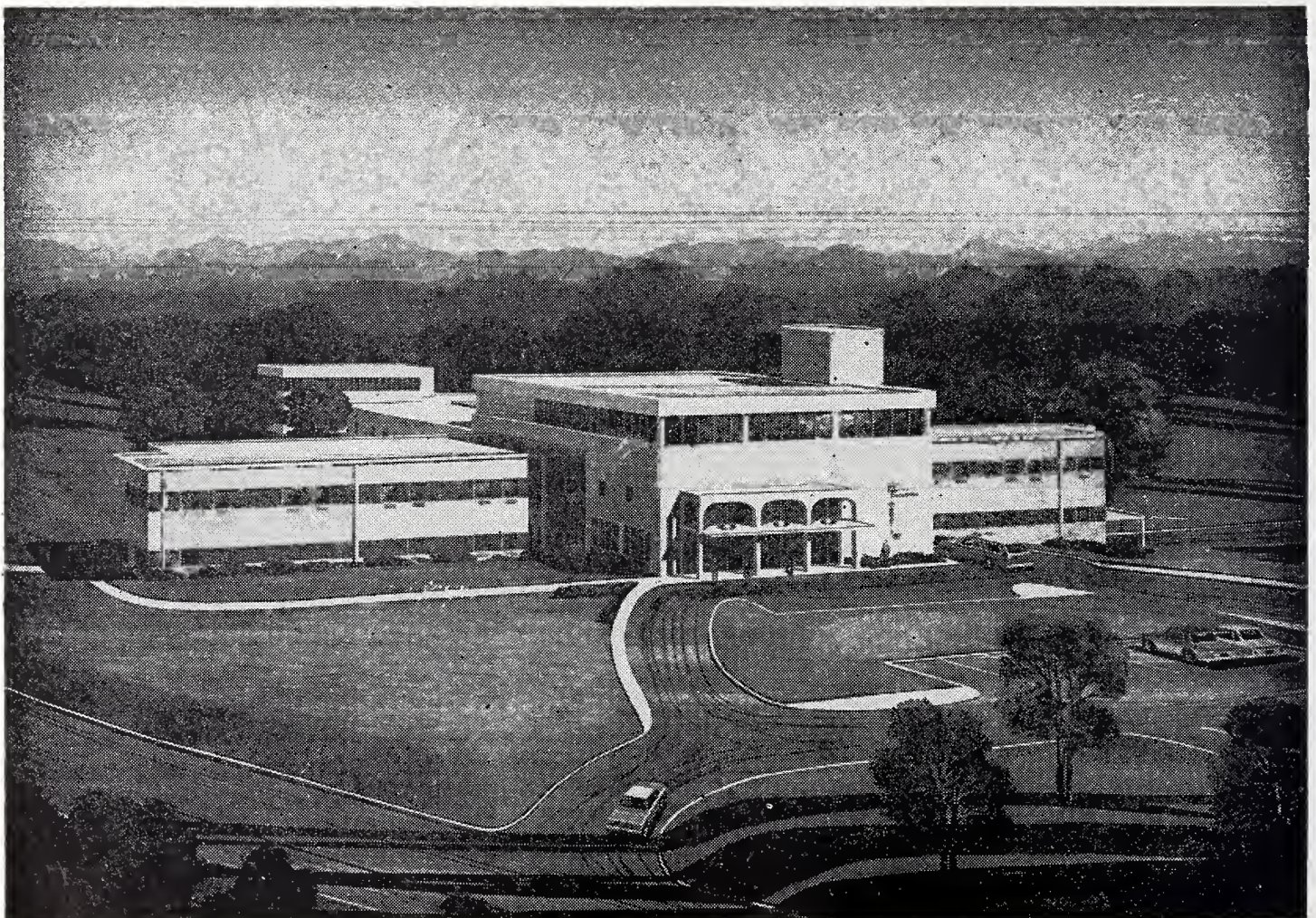
HILL CREST FOUNDATION, INC.
6869 Fifth Avenue South
Birmingham, Alabama 35212
PHONE: 205-836-7201

This 113-bed non-governmental psychiatric hospital provides modern facilities for diagnosis and treatment of patients with all degrees of illness, including those who show severely disturbed behavior. Alcoholic and drug abuse patients are also accepted.

In addition to care by psychiatrists and by consultants in all medical specialties, the treatment program includes occupational, recreational, and physical therapy, social services, and tutoring. Emphasis is on short-term, intensive treatment of voluntary patients.

Hill Crest is a member of: American Hospital Association, National Association of Private Psychiatric Hospitals, Alabama Hospital Association, Birmingham Regional Hospital Council.

Accredited by Joint Commission on Accreditation of Hospitals. Medicare Approved.
Blue Cross Participating Hospital.



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100	Equanil (400 mg.) ©	8.09 ..	Meprobamate (100 mg.) ©	1.83 ..	6.26
100	Darvon Comp. 65 © ..	7.83 ..	Propoxyphene HCl Comp. 65 © ..	4.63 ..	3.20
100	Pavabid (150 mg.)	11.73 ..	Papaverine HCl T.R. (100 mg.)	4.33 ..	7.40
100	Thorazine (50 mg.)	6.03 ..	Chlorpromazine HCl (50 mg.)	3.23 ..	2.80
100	Librium (10 mg.) ©	7.11 ..	Chlordiazepoxide HCl (10 mg.) © ..	4.89 ..	2.22

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PUREPAC

Elizabeth, NJ 07207

AMERICA'S LEADING NATIONAL BRAND OF GENERICS

Breast Feeding Best For Healthy Infants

Breast feeding or the use of a prepared formula meets the nutritional needs of infants, says a special communication in the Aug. 18 issue of *JAMA*. No other way of feeding infants has produced better growth or health than breast feeding when enough milk is available.

With the addition of minerals and vitamins, formulas based on cow's milk for protein and lactose and using vegetable oils instead of butterfat also meet current recommendations. A diet of evaporated milk, fresh cow's milk or skimmed milk does not alone provide the necessary nutrients.

The composition of human milk meets the minimum requirements of all current recommendations for nutrients, with the possible exception of vitamin D. Rickets due to inadequate vitamin D intake is seen in breast-fed infants only when exposure to sunlight or daylight is prevented by cultural customs or excessive cloudiness in winter.

The feeding of strained foods and infant cereals should be begun when the infant has reached the stage of development appropriate for feeding from a spoon and swallowing nonliquid foods, usually between three and six months of age.

Lifelong eating patterns begin during the first months, and adjusting caloric intake to needs and learning to enjoy a variety of foods are major objectives of infant feeding practices.

Hot Tap Water Can Scald Children

Eighty percent of homes tested in a recent survey had unsafe water temperatures, and most parents questioned were unaware of what water temperatures may result in the scalding of their children, according to a report in a recent issue of *Pediatrics*.

Tap water in most homes was set at a temperature greater than 130 F—hot enough to cause severe burns of the skin within 30 seconds. Scald burns were cited as the most common type of thermal injury in children, 7% to 17% of which were tap water burns requiring hospitalization. In 45% of the tap water injuries, the victim or peer turned on the water. Of the tap water scalds in which an adult turned on the water, 60% were abusive.

Turning household water temperatures down to 120 F-125 F and presetting all newly manufactured water heaters within that temperature range, were urged as methods to reduce injuries.

Homemade Ice Cream Causes Food Poisoning

Twenty-two outbreaks of food poisoning across the United States, with 292 individual cases, were associated with consumption of homemade ice cream, and some 73 of those afflicted were hospitalized.

Salmonellosis, when it could be traced, most often was from the eggs used in the ice cream mix, which were invariably dirty, ungraded eggs from someone's backyard hen coop that had not met inspection requirements for commercial eggs.

Another common factor was that the eggs and other ingredients had been mixed into a custard and frozen without cooking, which would destroy the offending organisms.

Although salmonellosis outbreaks caused by contaminated eggs have decreased notably in the last ten years, since the pasteurization of bulk egg products became mandatory and the USDA assumed supervision of egg grading, outbreaks caused by the use of ungraded farm eggs in an unsafe manner (uncooked) will continue to occur. The homemaker needs to be better informed regarding the proper handling and use of eggs.

Association Films' New Catalogs

A lively new 64-page catalog of free loan films and filmstrips for general audiences has just been published by Association Films, Inc. Containing several hundred films sponsored by business, trade, professional, governmental and other organizations, the "Free Loan Films" catalog is now available on request from Association Films, 866 Third Ave., New York, NY 10022 or from its ten regional film libraries.

The catalog of 16mm films—most of which are in full color and run from 15 to 30 minutes—includes such varied topics as health, ecology, economics, sports, science, commerce, international reports, education, travel and many other subjects of immediate interest to the general public.

Also available is a comprehensive new catalog of 16mm entertainment and educational films for general audiences. The 176-page book lists hundreds of films available on a rental/sale basis and may be obtained by writing Association Films. The comprehensive entertainment section runs the gamut from such unforgettable classics as "Brief Encounter," Hitchcock's "Rebecca" and Valentino's "Blood and Sand" to everyone's favorite Walt Disney cartoon or adventure; from the early films of W. C. Fields and Laurel & Hardy to the more modern "Deliverance," "Mame," and "The Autobiography of Miss Jane Pittman." The education section offers films from leading educational sources and encompasses a variety of topics, including the arts, health, sociology, nature, religion, history, ethnic studies, the sciences and much more.

The catalogs are available free to interested film using groups. Regional libraries are located in Littleton, Mass., Ridgefield, N.J., Oakmont, Pa., Atlanta, Ga., LaGrange, Ill., Minneapolis, Minn., Dallas, Tex., Portland, Ore., Dublin and Sun Valley, Calif.

Legalizing of Heroin for Pain Opposed in AMA Journal Report

Opposition to legalizing heroin for control of pain is voiced in a report in the Oct. 6 issue of *JAMA*.

Classifying the illicit narcotic as a substance which doctors could prescribe to relieve pain would not help the sufferers and would greatly increase the problem of controlling traffic of the drug, says John R. Lewis, Ph.D., a senior scientist in the AMA's Department of Drugs. Heroin has no advantage over morphine in controlling pain, Dr. Lewis concludes after a review of scientific studies on the subject.

Because of reports that many cancer patients do not obtain adequate pain relief, the news media have publicized a proposal that heroin should be made available for these patients. This proposal is based on the belief that heroin has certain advantages over morphine and other available strong analgesics.

Its proponents claim that it causes more euphoria and less sedation, nausea, and constipation, and enhances the appetite. However, none of the supposed benefits have been demonstrated by controlled clinical trial.

One reason many patients do not receive optimum therapy for relief of pain is due to misprescribing of already available pain killers. Physicians sometimes underestimate the dosage requirements and overestimate the duration of the action of the narcotic. Patient care could be improved through a greater emphasis on the education of physicians in the treatment of patients with chronic pain problems.

The AMA's House of Delegates rejected a proposal to endorse legalizing of heroin, believing that there should be more investigational data first.

Tennessee to Participate in Health Care Improvement Program for Prisons

The Michigan Department of Corrections has selected ten states in a federally financed program formulated to improve medical care and health services in correctional institutions.

"The courts have clearly mandated that inmates

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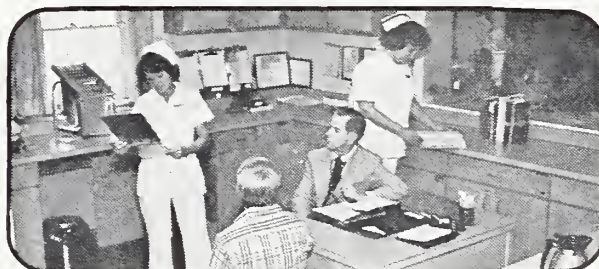


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are entitled to the same levels of health care as in the outside world," Jay K. Harness, M.D., director of the department's Office of Health Care, said in announcing the selections.

The states chosen are Colorado, Florida, Illinois, Nebraska, North Carolina, Rhode Island, Tennessee, Washington and Wisconsin.

The Office of Health Care is conducting the program and has subcontracted with Michigan State University (MSU), the University of Michigan, the American Medical Association (AMA) and the University Research Corporation to administer various phases.

Harness said that the AMA, who has already developed standards to certify health care in jails, will be concerned with the development of national standards for correctional health care. "We see the same thing happening with health care for prisons."

The universities will direct a series of workshops beginning in August when the University of Michigan's School of Public Health, Department of Medical Care Organization, will direct the workshop for medical administrators in Ann Arbor. They will be taking standard procedures used in health care in the outside world and blending them for use in a correctional setting.

MSU's Colleges of Human and Osteopathic Medicine, Department of Community Health Sciences, will direct workshops for health care providers in East Lansing in October, November and December.

The universities will provide several months of technical assistance on site to help the states with specific problems. A workshop for administrators and a three-day seminar for policymakers, including the governor's office and legislators, will also be held.

Study Confirms Relationship of High Blood Pressure to Obesity

Obesity is a major contributing factor in high blood pressure. Losing excess pounds often will bring down the blood pressure. In the nationwide Community Hypertension Evaluation Clinic screening of more than 1 million people, the overweight group had high blood pressure rates 50% to 300% higher than normal weight individuals.

Frequency of high blood pressure in overweight persons aged 20 to 39 years was double that of normal weight and triple that of underweight persons. Among those aged 40 to 64 years, the overweight group had a 50% higher high blood pressure prevalence rate than the normal group and 100% higher than the underweight group.

Since both high blood pressure and obesity are mass phenomena in the United States, even a partially successful effort to persuade the public to reduce might favorably affect millions of people. With safe methods of weight control, such as better long-term nutritional and exercise habits, an important advance might be achieved in the control of high blood pressure.

PSYCHIATRIST NEEDED

Psychiatrist is urgently needed for senior staff position at the Community Mental Health Activity, Ft. Campbell Army Hospital, Clarksville, TN. GS-14/15 position; 8 to 40 hours per week. Day duties only. Contract negotiable. Excellent supplemental position or for retired or semi-retired practitioner. Must be Tennessee or Kentucky licensed. Contact C. A. Caldwell, CMHA, (502) 798-2316/3827.

JOB OPPORTUNITY PHYSICIAN

The Lake Cumberland Health Clinic, Inc., has an immediate opening for a Medical Director of an ambulatory care clinic in Russell County, located in South Central Kentucky. Russell County is blessed with Lake Cumberland, world-famous for fishing and boating. Salary, benefits and liability to be discussed. Project approved and funded under Rural Health Initiative grant. Project to be implemented as soon as physician desires. Contact Eddie Girdler, P. O. Box 377, Jamestown, KY 42629. Phone (502) 343-3154.

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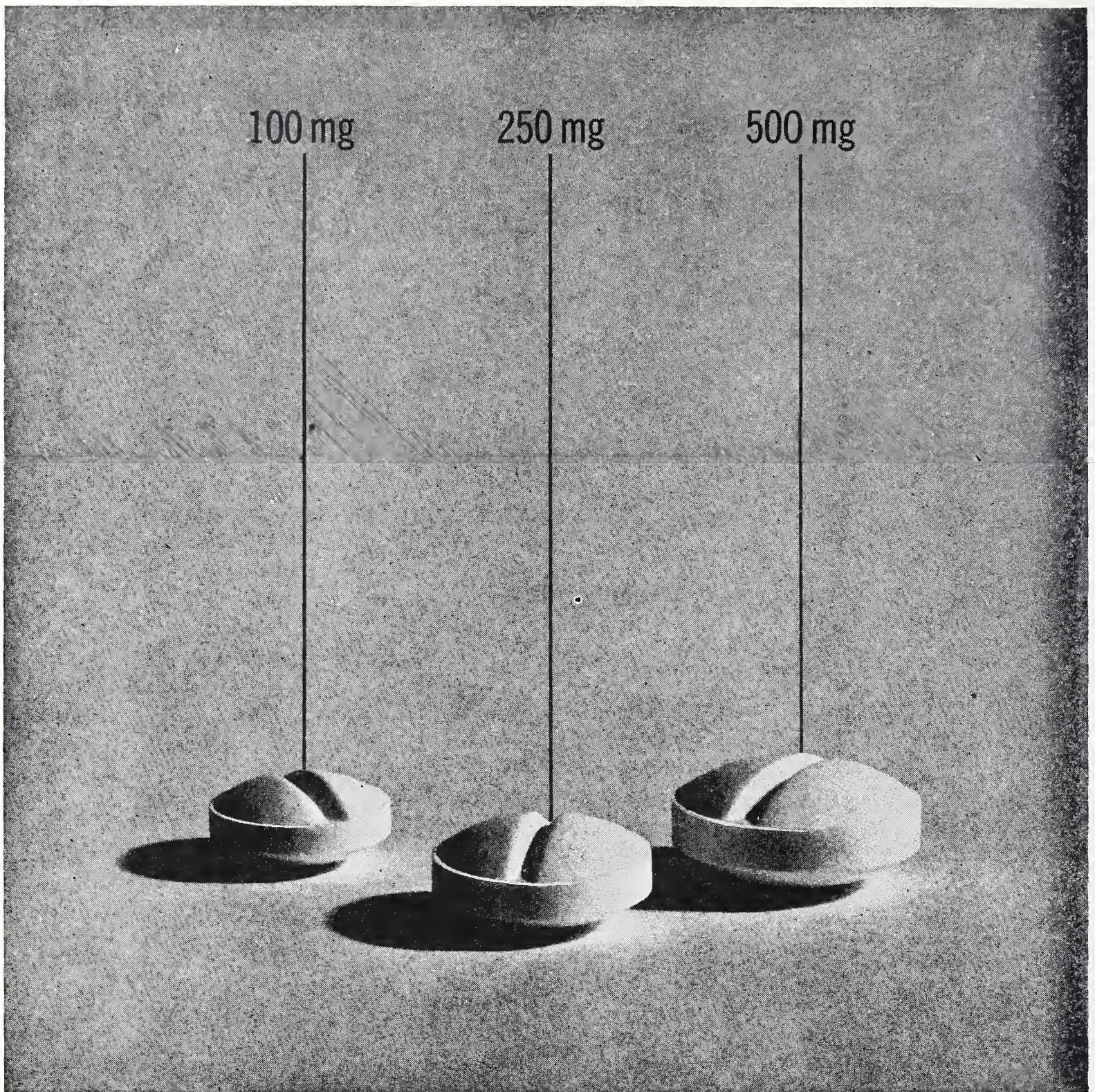
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Yellow Fever in Tennessee in 1878

Part I

S. R. BRUESCH, Ph.D., M.D.

Introduction

. . . scenes enacted here [Memphis] during the height of the epidemic would seem more appropriate to the domain of sensational fiction than to the serious pages of a medical journal; but the facts came under my own observation. . . .

By W [Surgeon-General John M. Woodworth, of U.S. Marine Hospital Service?]

Pestilential diseases have profoundly affected society in general, and the medical profession specifically, from antiquity to the present. The severe stresses of epidemics create emotional states that challenged writers to record these tragic phases of the human condition, either in works of history or fiction. Examples that come immediately to mind are Thucydides on the undiagnosed *Plague of Athens*, Daniel Defoe's *A Journal of the Plague Year (in London, 1665)*, and *The Plague* by Albert Camus. Although Camus used plague as a means for depicting the reactions of human beings in an isolated state of struggle to survive the unseen virulence of disease, yellow fever caused similar results. Camus concentrated on depicting the reactions of a physician, a journalist, a government official, a criminal avoiding the police, and a priest, and he wrote a novel that is a masterful, searching, symbolic exploration of the human conscience. Dr. Bernard Rieux, the physician, received the greatest attention in the novel and the reader learns at the end that he is also the narrator. There is a remarkable degree of correspondence between

the actual events in the Memphis yellow fever epidemic of 1878 and the fictional account of Camus. Often the novelist, through his distillation of experience and the extraction of illustrative events, can provide an impressive and useful generalized recording of such tragic human struggles.

Origin and Spread of Yellow Fever

The site of origin of yellow fever is unknown but can be narrowed down to the two regions where it has been known to be endemic for several centuries: tropical America and West Africa. Henry Rose Carter, reasoning from biological evidence that the Negro contracts the diseases as readily as other races but experiences a milder form with a lessened mortality, concluded that yellow fever originated in West Africa. The American Indian and the white settler manifest no immunity and suffer a high mortality from the disease. It is presumed that the disease was transported from West Africa to the Americas by post-Columbian voyages carrying infected persons and/or an infected strain of the *Aedes* mosquito. Since a high percentage of cases of yellow fever in Africans are so mild that they are seldom diagnosed, the recorded history of yellow fever is mostly concerned with the Americas where the disease was virulent and conditions were favorable for its rapid spread.

Carter concluded that there are no references to yellow fever in ancient Aztec and Mayan codices and that the first epidemic in the Ameri-

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YELLOW FEVER/Bruesch

cas occurred in Yucatan in 1648. Other scholars have described earlier epidemics (before the voyages of Columbus), which places a strain on the concept of an African origin for yellow fever. Major advocated an interpretation of Mayan hieroglyphics indicating a severe epidemic of yellow fever ("black vomit") in 1454, and nearly annual attacks from 1545 until 1576. Due to these attacks of yellow fever, the Mayans abandoned their cities and scattered over the countryside. But the evidence that yellow fever spread like wildfire through the islands of the West Indies, beginning in 1649 in Cuba, supports the idea of a later introduction of the disease. In the 17th century, yellow fever made its first appearance in South America in 1658 and in North America a decade later. Epidemics occurred in New York, 1668; Philadelphia, 1669; Boston, 1691; and Charleston, 1699. The name "yellow fever" for the disease was introduced in 1750 by Griffin Hughes in his *Natural History of the Barbados*. Thus the pattern of spread in the 17th century was from Central America (Yucatan) through the islands of the Caribbean southward into Brazil and northward to Boston, and involving coastal seaports from Boston to Charleston.

The 18th century brought considerable intensification of epidemics of yellow fever to cities on or near the north Atlantic coast. Extension then occurred to the Gulf coast, with Mobile experiencing "yellow jack" in 1705 and Pensacola in 1765. New Orleans experienced its first epidemic in 1796. The most severe epidemic in North American cities in the 18th century occurred in Philadelphia in 1793, with 4,044 deaths. New York suffered 2,086 deaths in the epidemic of 1798. Europe became involved in the 18th century with Cadiz, Spain, suffering an epidemic in 1705. Thereafter periodic epidemics occurred in the coastal cities of Spain and Portugal, and in Marseilles, France.

The pattern of yellow fever epidemics in the United States in the 19th century was away from the north Atlantic coastal cities into the Gulf Coast-New Orleans area, with extensions up the major rivers, especially the Mississippi and Red rivers. New Orleans became the major locus with mounting numbers of deaths reaching a peak in 1853, and thereafter a lessening mortality, the final epidemic occurring in 1905. Although statistics are inaccurate for these early epidemics in

New Orleans, it must suffice to indicate that in 1829 about 900 persons died of yellow fever; in 1833 and 1834, about 1,000 persons died each year; in 1837 and 1839, there were between 1,500 and 2,000 deaths each year; about 1,500 deaths occurred in 1841 and 1843, and 1847 brought about 2,700 deaths. The epidemic of 1853 was the most devastating of all, with the number of cases estimated between 30,000 and 40,000 of the 100,000 people who remained in the city (50,000 having fled at the start of the epidemic). The number of deaths was estimated at between 8,000 and 9,000, a mortality of about 25%.

Nearly every town of any size on the Mississippi River (as far north as Napoleon, at the mouth of the Arkansas River) had a visit from the saffron scourge; the fever also extended along the Red River, hitting Shreveport hard. New Orleans had barely recovered when it was hit with epidemics in 1854 and 1855, leaving about 2,500 dead each year. The 1858 epidemic resulted in about 5,000 deaths. Then came the mysterious departure of yellow fever from New Orleans, beginning in 1859 and continuing through the Civil War years and beyond to 1867. The disease was mild in 1867, with about 41,500 cases (25% of the population) and about 3,000 deaths (8%, a low mortality rate for yellow fever). The year 1870 brought 587 deaths and 1873 brought 226 deaths (Shreveport was attacked harder with 759 deaths). The 1878 epidemic in New Orleans was the most severe of the post-Civil War period: 27,000 cases with 4,050 deaths.

There was little yellow fever in New Orleans after 1878 until the 1897 epidemic brought 1,908 cases with 298 deaths. It appeared that New Orleans was done with yellow jack, but one last visitation occurred in 1905, with 3,402 cases and 452 deaths. Although called in late, the U.S. Public Health Service took swift, decisive steps, battling, for the first time, a known enemy, and by late August the number of cases was so sharply reduced that an unprecedented air of optimism pervaded the Crescent City. This was the last major epidemic of yellow fever to strike the United States.

Yellow Fever in Memphis Before 1878

As late as 1855 most people in Memphis, including the medical profession, believed that the city was located north of the yellow fever zone and that there need not be any concern about

suffering an epidemic. Evidently Memphians had not read history or they would have known about the epidemics that struck Philadelphia and New York in the late 18th century. But it is true, as noted previously, that the northern limit of the yellow fever zone had receded southward in the 19th century so that risk of an epidemic was greatest south of the Portsmouth-Norfolk area of Virginia.

Believing the city immune to an epidemic the citizens of Memphis hospitably received the crews and passengers of riverboats traveling upstream from New Orleans and felt quite safe in providing the victims of yellow fever with medical and nursing care. The sick were usually taken off the boats and carried through the streets to the Memphis Hospital (chartered by the Tennessee Legislature in 1829), located since 1841 on a ten-acre tract of land east of the city (now Forrest Park in the Medical Center).

During the disastrous epidemic of 1853 in New Orleans a total of 62 victims of yellow fever were carried off the boats at Memphis, of whom 36 died. Three cases of yellow fever among local citizens did create some doubts in the minds of Memphis physicians, but after a careful study of the circumstances (two had been exposed to yellow fever in New Orleans and the third had associated with diseased boatmen on the river landing) they concluded, “. . . we may safely reiterate the opinion expressed in our report of last year: that yellow fever has never originated this high up the Mississippi, and that there are no causes in our locality for originating it.”

But this pleasant delusion was destroyed in 1855 when an epidemic of yellow fever occurred among citizens of the community, mainly localized to South Memphis. The epidemic developed slowly. The first cases were taken off boats as early as Aug. 2 and altogether about 40 cases of yellow fever could be traced to the river. The first case not connected with the river occurred Aug. 14; the second patient with yellow fever was not diagnosed until Aug. 27. By Sept. 25 about 50 patients with yellow fever had been reported from South Memphis. Panic seized some of the residents of the area and a few fled the city. Most of the families who remained in South Memphis had the disease.

The Memphis chapter of the Howard Association was organized for the first time during this epidemic in 1855. Since the Howards were destined to become a major instrument in the care of the sick in the 1878 epidemic, brief men-

tion should be made about the origins of this benevolent association. The Howard Association originated in New Orleans in 1837. It consisted of a group of young businessmen who decided to dedicate themselves to caring for the sick during yellow fever epidemics. They named their association for John Howard (1726-1790) whose studies on fevers in European prisons brought about reforms in management that reduced the incidence of typhus fever. The Howard Association of New Orleans established the pattern of a privately financed charitable organization assuming the responsibility for organizing and carrying out medical and nursing care for the sick during the chaotic and disrupted periods of a yellow fever epidemic. Chapters were organized in most southern cities and served their communities well. The Memphis Howards raised \$4,000 during the 1855 epidemic and laid a strong foundation for future activities. About 85 deaths occurred from yellow fever in 1855, including three physicians (Drs. Reuben B. Berry, Zeno Trudo Harris, and Michael Gabbert). Aside from sporadic cases, Memphis did not have another epidemic of yellow fever until 1867, when 250 people died. This epidemic was confined to the northeastern section of the city and prevailed from Sept. 12 to the middle of November.

The epidemic of 1873 was far more serious, when yellow fever prevailed from about mid-August until Nov. 9, with an estimated mortality of 1,500 to 2,000. As the winter and spring of 1873 had brought epidemics of smallpox and cholera, 1873 was a bad year for Memphians. The disease began in “Happy Hollow,” an under-the-bluff community located at the northern limit of the city, about Aug. 10. Within a few days the fever had spread to the top of the bluff and into “Pinch”—a North Memphis community. The population in both communities was largely Irish. Consternation and panic ensued and about 20,000 persons fled the city. As the Irish remained, they suffered most of the mortality.

A reorganized Howard Association received a total of \$124,245 in donations, and assistance also came from Maj. W.T. Walthall of Mobile, Ala., and Dr. Luke P. Blackburn of Louisville, Ky. (later governor of Kentucky). Major Walthall commented on how distinctly the boundaries of the infected area were drawn: that part of Memphis lying north of Poplar Avenue and west of Third or Fourth streets. Dr. John H. Erskine's report of yellow fever in Memphis in 1873 included an excellent map showing a sharp locali-

zation of the disease to the area described by Major Walthall. Dr. Erskine made the interesting observation that the county jail, located in the heart of the infected district, had only two cases of yellow fever among 140 inmates. The jail was surrounded by a wall 15 feet high and was disinfected every day with carbolic acid and the fumes of burnt tar.

By late December the refugees had returned

and business was proceeding briskly. But now there lurked in the minds of the citizens of Memphis the thought that every summer they must consider the possibility that yellow fever might return and swiftly strike down many thousands of people. This fear of living in a temporary world resulted in a fall in property values, taxes remained unpaid, and no important plans were made for the future. The population of Memphis ceased to increase after the yellow fever panic of 1873.

Epidemic of 1878

Premonitions and Perturbations: bewildering portents, perplexity and disbelief

The apprehension of Memphians was first aroused when it became known early in May that an epidemic of yellow fever had developed in the West Indies. The fears of the populace were not eased by the unsanitary conditions within the city, the bankrupt state of the city government, and indications of disagreement within the Board of Health as to what action to take to forestall an epidemic. The accumulated experiences of the medical profession with yellow fever had led to the development of definite schools of thought concerning its origin (exotic vs local), transmission (contagious vs noncontagious), and prevention (quarantine vs sanitary measures). As each school had its advocates, it is not surprising that decision-making was difficult and delayed, perhaps covertly with the hope that the threat would disappear.

Events during this period involving city authorities, the Board of Health, the medical profession, and the press should now be mentioned. Dr. Robert Wood Mitchell (1831-1903) had accepted appointment as president of the Memphis Board of Health early in March 1878 and presided at the first regular meeting of the newly constituted board on March 11, 1878. The board consisted of three physicians (Dr. R.W. Mitchell, president; Dr. John H. Erskine, city health officer; and Dr. Robert F. Brown, secretary) and two representatives of city government (John R. Flippin, mayor, and Philip R. Athey, chief of police). Efforts of the board to undertake any extensive programs of sanitation were frustrated by lack of funds. The subject of quarantine had been discussed, at least informally, from early spring—Dr. Mitchell had recommended the establishment of quarantine from July 1 to Oct. 1

as a permanent institution. The minutes of the Board of Health meeting of June 3 include this statement:

The president of the Board of Health was requested to go before the Common Council and present his views in regard to quarantine, and to ask for additional money to be placed at the disposal of the Health Board for sanitary purposes.

By late June, the question of quarantine was being discussed widely. In a lengthy editorial in the *Memphis Daily Appeal* for June 28, the editor made a strong case for quarantine. The *Daily Appeal* for June 30 carried a petition signed by 32 Memphis physicians protesting the proposal to initiate quarantine for such reasons as "There is no proper or sufficient reason for such." "It would require an expenditure of money which is more urgently demanded to abate nuisances in the city." "A quarantine is without proper protection unless the depots of all railroads be guarded." "The trouble and annoyance to the boating interests will be insupportable, and quarantine should be enforced when an urgent danger is known to exist below us." Several letters for and against quarantine appeared thereafter on the pages of Memphis newspapers. Dr. Mitchell's proposal was rejected and he tendered his resignation as president of the Board of Health in a letter dated July 11, 1878. In his letter of resignation Dr. Mitchell asserted that the signatures on the petition opposing quarantine referred to previously were solicited by two "other medical gentlemen on the board [Drs. J.H. Erskine and R.F. Brown]." Dr. Mitchell then wrote, "It is my earnest and honest conviction that should we ever have yellow fever again, it will be our own fault in not taking known necessary precautions against it."

At the meeting of the Board of Health on July

27, Dr. Mitchell persisted in his resignation despite the petition signed by 400 citizens supporting him and refusal of the general council to accept it. Mayor Flippin then appointed Dr. Dudley Dunn Saunders to serve as president. This comment about Dr. Mitchell's resignation appeared in the *Daily Appeal* for July 28: "He enjoyed so large a share of public confidence, and was so efficient and so energetic that we had hoped he would continue in office at least until the summer had passed away, and with it all dread of epidemic disease." But, the author of the article continued in referring to Dr. Saunders, "A better selection could not have been made. A physician of highest standing and of extended experience, an untiring worker, practical and persistent, the public will hail his appointment with satisfaction and feel assured that with him and Dr. John Erskine . . . all will be done that can be done to keep our city free from epidemic disease." Since Dr. Mitchell later served as medical director of the Howard Association, he ended up serving the public as its principal leader in the fight against yellow fever.

Before continuing with the quarantine question, mention should be made of the situation downstream, i.e., New Orleans. Dr. Richard Brooke Maury, a member of the State Board of Health (created by an act of the General Assembly in March 1877 but unfunded and without executive power) wrote to Dr. Samuel Choppin, president of the New Orleans Board of Health, on May 21 asking for information. Dr. Choppin responded that official information would be sent to Dr. Maury regularly and that nothing would be concealed from the public. He then added that the *Borussa*, from Liverpool via Havana, was then quarantined below the city with six cases of yellow fever on board. Dr. Maury received the New Orleans weekly health reports but no cases of yellow fever were mentioned in them. The first official word of yellow fever in New Orleans came on July 26 when the press of the nation published a letter written by Dr. Choppin to Surgeon-General John M. Woodworth of the U.S. Marine Hospital Service informing him of the presence of yellow fever in New Orleans. The *Memphis Daily Appeal* of July 27 carried the news that yellow fever had reached Vicksburg—two men taken off the towboat *John Porter* had died and a third man had died on board the boat after it had left Vicksburg. The earlier rumors were now official: yellow fever was in New Orleans and had started up the Mississippi River

towards Memphis.

Dr. R.F. Brown, secretary of the Memphis Board of Health, wrote a letter to Mayor Flippin on July 26 informing the mayor of the official news that yellow fever existed in New Orleans and asking that the mayor issue *immediately* a proclamation declaring quarantine established. Also on July 26 Dr. Erskine, the city health officer, requisitioned a tugboat to intercept the *John Porter* and to instruct the captain of said towboat to pass on upstream without a landing at Memphis. Mayor Flippin issued a proclamation on July 28 declaring quarantine established. The editor of the *Appeal* (J.M. Keating) commented ". . . the war of the doctors over it has ceased, therefore the columns of the *Appeal* will hereafter be relieved of the dreary subject."

The idea of guarding public health by excluding infected ships probably was first applied by the Venetian Republic in 1374. Also in 1374 the ruler of Milan forbade the admission of people from infected places (usually the Black Death, or plague) to the territories of Milan on pain of death. Isolation of travelers for 40 days (*quarantina*) was first practiced in Marseilles in 1383. By the early part of the 15th century most major European cities had established detention stations to protect against introduction of pestilence. Thus, the concept was firmly established and supported by several centuries of experience. But in 1878 the value of quarantine in excluding yellow fever was hotly debated, the issues involving not only medical aspects of the disease but also social, political, and economic interests. Arguments based on ignorance, self-interest, or emotions tended to obscure the rational issues. It was accepted that most quarantines initiated to exclude yellow fever had failed to do so, but it was not clear whether this was due to a flaw in the concept or inadequate application of the idea. Or, perhaps due to difficulty in diagnosing the first cases of yellow fever (the spring/summer period brought fevers of many sorts, especially malaria, and it was not easy to diagnose yellow fever until several cases had occurred), the quarantine was applied too late to be effective.

Quarantine made sense only to those who believed that yellow fever was exotic, i.e., imported from downstream regions. There was much evidence to support those who advocated a local origin: miles of Nicholson wooden paving were decaying and emitting a foul odor, the soil of the city reeked with offal and excreta due to the absence of a sewage system, dead animals were

decaying in many parts of the city, pools of stagnant water stood in the streets and in the bayous, and the streets were filthy because there was no organized scavenger system. It seemed logical that such noisome conditions could give rise to a poison that would cause yellow fever.

The concept of quarantine was further undermined by lack of knowledge about how yellow fever is transmitted from one person to another. Most physicians experienced in fighting yellow fever believed that it was noncontagious and speculated that the disease was transmitted through contamination of fomites. Although transmission by mosquitoes had been suggested earlier by several medical writers, e.g., Dr. Josiah Clark Nott of Mobile, Ala., in 1848, the idea was not widely known. Dr. Carlos J. Finlay was the first really serious proponent of mosquito transmission, beginning with his first publication in 1881. His advocacy of this idea ended with the findings of the Reed Commission in 1900 proving that yellow fever is transmitted by the *Aedes aegypti* mosquito.

Having the advantage of hindsight, one can understand why quarantine as then applied would fail to exclude the disease. Firstly, total isolation of the city would be required, not merely interception of travelers at quarantine stations on the river and at railroad stations. Martial law would probably be necessary to accomplish such total isolation. Secondly, infected *A. aegypti* must also be excluded from the city. As the female of this species (the sex that bites humans) can transmit the virus of yellow fever throughout her lifetime (a mean of 70 to 116 days with a maximum of 225 days), infected imagoes could readily be transported by boat or rail car from New Orleans to Memphis. Although the flight range of *Aedes* mosquitoes is not far (probably a distance not over 300 meters), they can be distributed greater distances by wind drift. But the peridomestic breeding habits of *Aedes* make it favor urban areas (cans, bottles, watering troughs, funeral urns, gutters, etc. are favorable sites), and also their being excellent travelers in boats or rail cars creates the possibility of long-distance transport. Since this information was not available in 1878 and mosquitoes would not have been excluded, the quarantine was doomed to fail unless the quarantine stations were located far enough away from the city to prevent wind drift from carrying infected

imagoes into the city. The lack of knowledge about the means of transmission of yellow fever also excluded the use of a simpler approach: destruction of the *Aedes* mosquito. The firing of cannons and the burning of tar and other noxious substances in the streets might have inadvertently killed some mosquitoes (which were reported to be very numerous that summer) but hardly enough to prevent an epidemic.

Dr. Dudley D. Saunders, writing on his observations of the five yellow fever epidemics in Memphis, mentioned certain widely held beliefs:

It is well to note the rapidity with which an epidemic may be crushed out by scattering the inhabitants of a town or city when it prevails, into tents even a few miles or short distance from the infected district.

. . . The experiments of disinfection which were tried here in 1878 accomplished no good results that I could see. The pure bracing air at the frost or freezing point is the most powerful disinfectant we have any positive knowledge of.

Knowledge that the *Aedes* mosquito population was concentrated in the city and that the imagoes do not survive freezing temperatures (usually a frost or two will eliminate them) explain the observations of Dr. Saunders. It is possible that in unusually warm winters, infected imagoes might survive and initiate yellow fever on the return of warm weather. Even the eggs will not survive more than a few days of freezing temperature. But the yellow fever virus is not contained in the eggs, so the disease can be endemic only in warmer climates where infected imagoes can survive the winter. Thus it appears impossible that Memphis could ever have had endemic yellow fever. Moreover, it appears improbable that even *Aedes* eggs could have survived very many Memphis winters, although this may have occurred in 1879. Thus for Memphis to have an epidemic, both the virus and *A. aegypti* mosquitoes had to be reintroduced from warmer climates (usually the Caribbean Islands via New Orleans).

The first appearance of epidemic yellow fever in Memphis in 1855 is likely to be related to the presence of the *A. aegypti* mosquito. Carter wrote: "We have strong evidence, indeed proof, that there were no considerable number of *A. aegypti*, if any, in Memphis as late as 1853. . . ." The location of Memphis placed it in a borderline area in which eggs of *A. aegypti* survive some winters and not others. Thus Memphis might have been infectible some summers without a new introduction of the mosquito but in other years

introduction of the insect, usually by boat, was necessary for the city to become infectible. The observations of Dr. Lewis Shanks concerning the epidemic of 1855 provide an explanation of why the *A. aegypti* mosquito was present in great numbers in Memphis in 1855.

The infected district in South Memphis is comparatively new, having been built up and graded in the last six or eight years, and principally in three or four years. The streets nearest, and running parallel with the river, have been graded by filling up the hollows, and cutting through the ridges, almost to a level. . . . These embanked and elevated streets dam up, and obstruct the flow of water through the imperfect culverts . . . the exemption of all that part [of Memphis] which is best drained, from the epidemic prevalence of yellow fever . . . indicates the leading feature, in the sanitary measures, which should be carried out in the future.

It can be presumed that such extensive man-made collections of water associated with urbanization would match the breeding habits of *A. aegypti* and in some summers, at least, their number would become great enough to propagate yellow fever locally should humans with the virus enter the city.

Shortly after Mayor Flippin proclaimed the quarantine, Dr. Erskine, the city health officer, established three quarantine stations: one at the lower, or southern, point of President's Island, on the Mississippi River; the second at Germantown Station of the Memphis and Charleston Railroad, some 12 miles east of the city; and the third at the Whitehaven Station of the Mississippi and Tennessee Railroad, eight miles south of the city. As steamboat and railroad officials had promised a rigid surveillance over passengers and baggage, it was presumed these stations would be effectual. Police officers were authorized and required to act as a sanitary force, and Dr. A.A. Laurence was elected quarantine physician at a salary of \$300 per month. The Board of Health ordered Dr. Laurence to proceed at once to the quarantine station on President's Island and take full charge. Since it soon became apparent this action was "too little, too late" no further comments need be made on the Memphis quarantine. It should be noted, however, that the quarantine of Jackson, Tenn., appeared to be successful, in that this community had little or no yellow fever, whereas nearby Brownsville, Tenn., had a severe epidemic with 844 cases and 212 deaths.

Despite the near bankruptcy of the city treasury, sanitation efforts were intensified, financed from the \$8,000 Mayor Flippin said the city had

available to spend on sanitary work. These items from the *Memphis Daily Appeal* indicate that some effort was being made to clean up the city:

July 19: The Board of Health Sanitary Force, with fireplug and hose, washed out several sections of alleys and street gutters yesterday. Give the streets and alleys plenty of water.

July 20: The Board of Health had the street and alley gutters sprinkled with lime yesterday morning as a disinfecting agent.

July 31: The Board of Health's plans will be expensive. Suggest that the Howard Association donate \$5,000 from its funds to support the work of the Board of Health.

Dr. Erskine advertised for 100 laborers and 25 carts to go to work immediately cleaning up the city.

Negotiations with the Howard Association came to naught as officers of the association claimed that the group's charter forbade use of funds for any purpose other than care of the poor who were sick with yellow fever.

August 1: The city is quiet and yellow fever rumors appeared to have abated.

August 4: The Board of Health met last night. No case of yellow fever has been reported in the city so far. The board has determined that publicity shall be the rule as to any case which appears. The house and locality where yellow fever appears will be isolated and disinfected and even the square where the case developed will be disinfected and people warned to stay away. This should effectually dispose of the tale circulated by sensationalists about the presence of yellow fever here.

Minutes, Board of Health meeting of August 4th: It was unanimously agreed that the Board of Health make an open and manly fight as far as the fever is concerned, and make no attempt at concealment.

These measures [quarantine and sanitation] according to Keating, "had some effect with most of the people of the city but there were a few who . . . went about expressing their fears, and with an assumption of wisdom which neither their experience, habits nor education would warrant, predicted the direst consequences to the city." The uneasy feeling was thus kept alive during late July and early August, and the gloomy prognostications of the few became a reality by mid-August.

Panic—The Exodus

Daily Appeal, July 24: We learn from New Orleans that 24 more people have died of yellow fever there in the past few days. We need not fear in Memphis. We were never in as good a condition from a sanitary point of view. Our streets and alleys were never as clean, and strict attention is now being paid to the enforcement of sanitary regulations on private premises. Nothing in our atmosphere invites that dread disease. There are no grounds for alarm on the part of our people. The yellow fever is not indigenous to our latitude and unless imported, there is no reason to fear it. It cannot be imported as long as our sanitary laws are enforced.

It would be a pseudoclarification to state a specific date as marking the transition from uneasiness and bewildering portents of the citizens of Memphis to fear and panic. A marked acceleration of such a transition must have occurred July 26/27 when the Memphis Board of Health announced that it had been officially informed of the existence of yellow fever in New Orleans and Mayer Flippin proclaimed the establishment of quarantine. Despite reassuring statements from the Board of Health and the press most people doubted the effectiveness of quarantine as well as the lack of certainty in the medical profession in diagnosing the early cases of yellow fever. Nor was there any certainty among the public or the medical profession that even drastic sanitary measures would prevent an epidemic.

The tendency of recent social historians to berate the medical profession for not making earlier diagnoses of yellow fever for fear of creating

Austin Flint, M.D., an eminent American internist, classified fevers in 1879 into four categories: (1) continued, (2) periodic, (3) eruptive and (4) rheumatic. Dr. Flint placed yellow fever in the periodic fever category more for convenience than any periodicity of the fever. Thus it most closely resembled certain of the malarial fevers (intermittent and remittent), typhomalarial fever, and dengue. "In mild cases, yellow fever, except when the disease is prevalent, could not easily be distinguished from ephemeral fever or fericula. . . . These mild cases afford occasion for doubts and differences of opinion, as to the diagnosis, before the establishment of an epidemic." The difficulty in the diagnosis disappears when the sequelae of the fever appear: "black vomit"—gastric bleeding, and icteroid color (yellowness of the skin).

panic or because of chauvinistic loyalty to business and political interests fails to recognize the genuine difficulty in distinguishing yellow fever from other fevers until several cases occur.

Without the modern apparatus of precise diagnosis, the physician of 1878 was placed in a cruel dilemma, suffering both intellectual and emotional stress, in reaching a decision. Camus depicted this dilemma in the following dialogue between Dr. Bernard Rieux and Joseph Grand, a clerk:

[Dr. Rieux] was gazing frowningly at the figures on the sheet of paper. "Well," he said, "perhaps we'd better make up our minds to call this disease by its name. So far we've been only shilly-shallying. Look here, I'm off to the laboratory; like to come with me?"

"Quite so, quite so," Grand said as he went down the stairs on the doctor's heels. "I, too, believe in calling things by their name. But what is the name in this case?"

"That I shan't say, and anyhow you wouldn't gain anything by knowing."

"You see," Grand smiled. "It's not so easy after all."

Reports in the press indicated the presence of the usual summer diseases:

July 19: The ague or old-fashioned shaking chill prevails to a considerable extent in the city at present.

July 21: Several cases of sun-stroke reported.

July 25: Malarial fever is the chief sickness among our citizens.

It should be noted that just as there was difficulty and even reluctance to diagnose yellow fever at the beginning stage of the epidemic, excess in the opposite direction occurred once the epidemic was established. Mortality during the summer season was high, even in nonepidemic years. But once yellow fever declared its presence, all febrile diseases were diagnosed as yellow fever. It will never be known how many of the deaths recorded as due to yellow fever were actually caused by some other kind of virulent febrile disease. Confusion was created for those who recovered from a febrile disease during yellow fever epidemics because they assumed that they had survived the saffron scourge and were thus immune to disease in future epidemics. Second attacks of yellow fever are extremely rare. Dr. Dudley D. Saunders wrote: "I do not think I have ever seen a positively authenticated second attack of this disease. The nearest approach to one was in the person of the present president of this Association [Dr. G.B. Thornton,

president of the Medical Society of Tennessee], and after mature reflection on his case, I doubt whether the second was yellow fever." But Dr. Thornton thought otherwise and stated:

It has been a very prevalent opinion that one attack of yellow fever gives an absolute immunity from a subsequent attack. As a very general rule this proposition is true. The weight of professional evidence, so far as I know, is in its favor, but recent observations and personal experience have convinced me this is erroneous. . . . I have been the subject of the disease twice in the same locality, the first time in October, 1867, and the second in October, 1878.

Public apprehension no doubt was increased on Aug. 6, when the press carried news of the death of a New Orleans steamboat hand of yellow fever at the quarantine hospital on President's Island. The man, whose name was William Warren, slipped into Memphis the night of Aug. 1. Becoming sick on Aug. 2, he was admitted to the City Hospital, where his illness was diagnosed yellow fever. Dr. Erskine was notified and ordered the man taken to quarantine hospital where he died on Aug. 5. Not only was this the first case of yellow fever diagnosed officially in Memphis in 1878, but, it also demonstrated that the quarantine regulations were ineffectual.

On Sunday, Aug. 11, the populace was shaken further by arrival of telegrams from officials and private citizens of Grenada, Miss., asking for medical supplies, nurses, and other assistance in fighting the yellow fever that had broken out in that city. Grenada is an inland city located about 90 miles south of Memphis. On the evening of that same day a special train left Memphis for Grenada carrying two representatives of the Howard Association, ten nurses, and Dr. R.F. Brown, secretary of the Memphis Board of Health. This delegation telegraphed back to Memphis, "Yellow fever, and no mistake: sixty cases and five deaths today." On Monday, Aug. 12, Butler P. Anderson (one of the Howard representatives) telegraphed the *Appeal* that yellow fever prevailed in Grenada and that there was then a total of 100 cases. These facts were published by the *Appeal* on Aug. 13. The publication of the confirmation of the rumors of yellow fever in Grenada added to the alarm already being experienced by the people of Memphis. Business was neglected; men met in groups to discuss the news and speculate on the probability of Memphis being attacked. Actually, as will be discussed next, yellow fever had already invaded

Memphis.

The illness of Mrs. Kate Bionda of 212 Front Street, who died of yellow fever on Aug. 13, was announced on Aug. 14 by Dr. Saunders, president of the Board of Health, as the first case originating in the city. According to Keating there were several earlier cases involving citizens of Memphis. The death records in the Memphis and Shelby County Health Department indicate that a policeman, James McConnell, died of yellow fever on Aug. 13; that seven yellow fever deaths were recorded on Aug. 14; 22 new cases were reported on Aug. 15, and 33 on Aug. 16. All doubts were now erased; panic seized the populace, and the exodus that had started a few days earlier as a trickle became a torrent.

The hejira of Memphians took place mainly from Aug. 14-18. The principal avenues of escape were the dirt roads leading from the city (by foot, buggies, carriages, and wagons) and the railroads. For those who could afford the fare, the railroads offered the best means of escape. The Louisville and Nashville Railroad to Louisville, Cincinnati, and points north, and the Memphis and Charleston Railroad to points east bore the brunt of the demand. The aisles of the cars were packed and the platforms crowded. Cars were added to regulate trains and special trains were placed in service but the stream of passengers seemed endless. "Men, refused admittance to the cars, took forcible possession of them, making such an exhibit of will, backed by arms, as deterred even the few policemen present from any interference. . . . No arrests were made—not even when the windows of the cars were opened from the outside, and men and boys were thrust in, over and despite the expostulations of the respectable women who occupied the seats."

Refugees who fled to nearby towns and villages on foot or by horse and buggy soon found their way blocked by the terrified residents of those communities armed with guns (shotgun quarantine). Many had no alternative but to take to the woods and camp out under circumstances difficult for even the hardiest. It is estimated that about 5,000 refugees camped singly, or in small groups, in the rural areas a few miles outside the city. As will be mentioned later, refugee camps were quickly established outside the city and provisioned by military and charitable organizations.

Few refugees opted for the steamboat route, perhaps because few boats going upstream were available at the Memphis landing but more prob-

YELLOW FEVER/Bruesch

ably because of the fear that they could become trapped on a boat and not be allowed to land if yellow fever should break out aboard.

It is difficult to arrive at a figure for the number of Memphis refugees in 1878. Part of the problem is the uncertainty about the population of Memphis in 1878. The U.S. census for 1870 gave a population of 40,226. But it was believed that this figure was 5,000 too low because the legislature had reduced the size of the city by cutting off parts of the ninth and tenth wards. Sholes' Directory of the City of Memphis for 1877 carried a population estimate of 47,385 for 1875. There is considerable agreement that about 20,000 persons (14,000 blacks and 6,000 whites) remained in Memphis at the end of the exodus. Thus between 25,000 and 27,000 persons fled from the city. About 5,000 of these remained as refugees in Shelby County rural

areas, and the other 20,000 sought haven in more distant Tennessee cities (Nashville, Chattanooga) and cities outside Tennessee (mainly St. Louis, Louisville, and Cincinnati). Many went to small towns and plantations in Mississippi and Arkansas, and others sought safety in the spas of Tennessee and Virginia. A large contingent went to Bon Aqua in northeast Hickman County. Some of the refugees already harbored the virus of yellow fever and died on the way "like dogs, neglected and shunned . . ."; or, having reached their destination, became ill and died and thus brought misery and death to their hospitable hosts.

An especially unpleasant aspect of the exodus was the disappearance of the ordinary courtesies of life. Politeness gave way to selfishness, and the desire for personal safety broke through the veneer of the social amenities.

Parts II and III will appear in the January and February issues of the JOURNAL.

FEW MANUFACTURERS STILL MAKING PROTECTIVE VACCINES

Vaccine manufacturers are dropping out one by one, leaving only a few producers, whose supplies might not meet needs in an epidemic. Unpredictable, hovering litigation, rigid government regulations, and uncertain profit are cited as reasons for companies leaving this scientifically exacting field. At the same time, public apathy about the likelihood of epidemics and annoyance growing out of the 1976 swine flu campaign debacle threaten efforts to immunize more youngsters against childhood diseases.

National medical and health care organizations are joining with the government to help restore public confidence in the effectiveness of vaccines. Only one company now makes the vaccines to protect against measles, mumps and rubella. Only one company makes the polio vaccine. The number of influenza vaccine manufacturers has declined from 13 to four.

Liability problems arising out of immunization programs are so hot to handle, that the government still has not been able to formulate a new national policy on this question, though it has been exploring a number of alternatives.

The Department of Health Education and Welfare, joining with the American Medical Association and other medical and health care organizations, has been trying to boost the percentages of youngsters through age 14 who are vaccinated from the present low of 65%, to 90% by next autumn.

More than 19 million children aren't immunized against polio, and 12 million each are not protected from measles and rubella. Nearly 16 million had not received the full course of injections against diphtheria, pertussis and tetanus.

The Countersuit in Medical Malpractice Litigation

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Editor's Note: *The firm of Watkins, McGugin, McNeilly and Rowan has been active in the defense of physicians and surgeons in medical malpractice cases for nearly 30 years. As nearly 90% of the author's time is committed to that area, he is particularly cognizant of legal developments in the field.*

The rapid growth of medical malpractice litigation in the 1970s led to a number of statutory reforms designed to insure the continued availability of medical services to the public. Through the intervention of expertise-rich medical screening panels in advance of trial,¹ by arbitrarily limiting patient recoveries,² and by shortening the time in which suits for medical malpractice could be instituted,³ the states attempted to control the malpractice "crisis."

With few exceptions, none of the reform measures has had any demonstrable impact upon the number of medical malpractice suits, their resolution, or the ultimate costs of medical care.⁴ Following on the heels of these "reform" measures, physicians across the country began to fashion their own remedy for the growing volume of malpractice claims perceived to be frivolous, groundless suits. That response was the countersuit.

Physicians enjoyed some early victories in countersuits against former patients and their attorneys. Perhaps most notably, in 1976 Dr. Leonard Berlin won an \$8,000 jury verdict against a patient, her husband and their two attorneys, grounded on legal theories of malicious prosecution and a breach of the attorneys' duty not to willfully file suits without first establishing a reasonable cause.

In the wake of *Berlin* and during the pendency of the appeal in that case, a number of physicians turned to the countersuit as a response to medical malpractice claims. Other victories followed, and some professional groups began assessing members to fund countersuits in the interests of the association.⁵

However, countersuits attempting to establish

a new basis of liability beyond the traditional malicious prosecution or abuse of process doctrines have not fared well in the intervening years. In fact, *Berlin* has been reversed, and the record may signal that the initial expectations surrounding the countersuit will not be realized.

*Lyddon vs Shaw*⁶ is a good example. On Jan. 9, 1974, a patient presented himself for treatment in the emergency room of the Swedish American Hospital in Illinois with a history of twisting his ankle while playing basketball. Dr. Donald W. Lyddon, Sr., a Board Certified orthopedic surgeon, performed an examination, ordered two x-rays, and found the ankle normal with the exception of soft tissue swelling. Dr. Lyddon diagnosed the condition as a sprained ankle, applied an ice pack and elastic bandage, and told the patient to seek other medical treatment if the symptoms persisted more than seven days. This was the last and only occasion on which Dr. Lyddon administered to this patient.

Sixteen days later, on Jan. 23, 1974, the patient had retained attorney Shaw, and a suit for medical malpractice seeking \$100,000 in damages was filed. *Before the conclusion of the suit* the surgeon filed a countersuit against the patient and his attorney contending that each had a duty to refrain from "willfully and wantonly" bringing suit without having reasonable cause to believe the doctor was guilty of malpractice, and that the attorney, as an officer of the Court, had a duty to refrain from filing suit without reasonable evidence to support the allegations of negligence.

The suit alleged that the patient and his attorney had ample time to obtain all hospital and medical records, yet the suit had been filed without doing so, without even examining any x-rays, and without consulting a qualified practitioner. The doctor further alleged that the suit had

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damaged his reputation as an orthopedic surgeon, had caused mental anguish, had required him to defend his professional ability from patients' inquiries, and had resulted in lost income from time spent in the defense of the case along with higher medical malpractice insurance premiums.

The attorney argued that he had no legally recognizable "duty" to Dr. Lyddon and thus could not be liable to him under traditional negligence theories, and that the tort of malicious prosecution was the doctor's sole remedy. Further, he argued that the requirements of a suit for malicious prosecution—the institution of judicial proceedings by the defendant, a lack of probable cause in instituting the suit, malice in the initiation of the proceedings, termination of the suit in the doctor's favor, and "special injury"—had not been met.⁷

The Illinois Court of Appeals agreed with the attorney on all counts.⁸ As will be discussed later, the doctor's suit for malicious prosecution was fatally defective in that the prior proceeding had not terminated favorably to him before his countersuit was filed. In every jurisdiction, the favorable termination of the prior suit is an indispensable prerequisite to a suit for malicious prosecution.

But did the doctor have a cause of action against the attorney and his client under negligence principles? The Court thought not. The doctor had argued that the Illinois Barratry Statute, which proscribes the willful stirring up of litigation, and DR7-102 (A)(1) of the Code of Professional Responsibility, which prohibits the filing of suit on behalf of a client when the attorney knows or should know the action will merely serve to harass or oppress, established a duty on the part of the attorney to the public and to the doctor which had been breached by "willfully and wantonly" filing a medical malpractice suit without reasonable cause to believe in the accuracy of the allegations of malpractice.

While the Court recognized that the countersuit had been suggested by a number of scholarly commentators as a means of diminishing the number of meritless malpractice suits,⁹ the Court found that neither the Barratry Statute nor the disciplinary rules (DR) established an independent duty on the part of the attorney to the physician. The Court found that the public interest, in affording free access to the courts to all

private litigants, required the rejection of any effort to extend tort liability for the wrongful filing of a lawsuit beyond the narrow ambit of an action for malicious prosecution or abuse of process.¹⁰ The Court refused to recognize a rule, given the very purpose of the courts to determine if an action has merit, which would hold a plaintiff and his attorney liable for negligently or even intentionally failing to determine in advance that which only the court ultimately may determine.

The same conclusion was reached by the Michigan Court of Appeals in the case of *Gasis vs Schwartz*.¹¹ In *Gasis*, during the pendency of the suit against him, the doctor filed a countersuit against the plaintiff's attorney alleging malicious prosecution and negligence. The Trial Court dismissed the complaint altogether, and on appeal the dismissal was affirmed based upon the same two rules adopted in *Lyddon*:¹²

1. A favorable determination of the prior suit is an essential element in a suit for malicious prosecution;
2. The patients' attorneys owe no legally recognizable duty under general negligence principles to the physician to refrain from acting on behalf of their clients.

Even when the physician has won the initial case, the vast majority of appellate courts have been unwilling to afford a remedy based upon general negligence principles, and have confined the physicians' right of recovery to the doctrine of malicious prosecution or abuse of process.¹³

In *Hill vs Wilmott*,¹⁴ two patients sued Dr. Hill contending he had erroneously diagnosed that they had contracted venereal disease. Shortly thereafter the case was dismissed as to Dr. Hill on summary judgment. The doctor then instituted a suit for \$250,000 in damages against the plaintiff's attorney of record contending that he had been negligent in instituting the suit. The sole question before the Kentucky Court of Appeals was whether a former litigant can sustain a cause of action against an adversary's attorney based upon negligence. The Court answered in the negative.

The doctor had argued that Canon 9 of the ABA Code of Professional Responsibility, as adopted by Kentucky, which cautions that a lawyer should avoid the appearance of professional impropriety and should act in a manner that promotes public confidence in the integrity and efficiency of the judicial system, had been breached by the attorney's conduct for which he should be liable in damages to the physician.

The Court rejected the contention and held that the Canons of Ethics did not give rise to an individual right of action for money damages, but was designed only to protect the public-at-large by insuring a minimum level of competence. The sole remedy for a violation of that ethical code was the imposition of disciplinary measures by the Bar Association.¹⁵

In addition, the Court extended its holding and held that whatever the specific ground upon which a claim of duty is couched, no duty would arise under Kentucky law in favor of a physician sued by a patient's attorney. Adopting the rule in California as set forth in *Donald vs Garry*, the Court held that an attorney may be liable for damages caused by his negligence only to a person *intended to be benefited by his performance*.¹⁶ Consequently, the imagination of physicians' attorneys in scouring statutes or the common law for the source of a "duty" could not create in the physician an actionable right to proceed outside of the common law cause of action for malicious prosecution. In substance, the Court held that an attorney had no duty to the physician to investigate the facts and law prior to filing a medical malpractice action inasmuch as the physician was not intended to be benefited by the attorney's services.

In every other case, with one notable exception, the appellate courts have refused to broaden theories of recovery in favor of physicians' countersuits.¹⁷ The majority of appellate courts have confined the right of recovery to malicious prosecution or abuse of process, and even novel theories such as constructive contempt or invasion of privacy have been uniformly unsuccessful.¹⁸

The precursor of the countersuit, Dr. Berlin's original victory in 1976, was reversed by the Illinois Court of Appeals on Sept. 14, 1978.¹⁹ The Appellate Court in *Berlin* rejected all of Dr. Berlin's theories of recovery which had led to an \$8,000 jury verdict at the Trial Court.

The Court reversed the lower Court's finding of malicious prosecution. Not only had Dr. Berlin failed to allege that the initial malpractice claim had been terminated in his favor; the Court also found a complete absence of malice, another indispensable prerequisite to a case for malicious prosecution. While joining the ranks of courts limiting the physician's right of recovery to malicious prosecution, the Court also held that the filing of a weak or frivolous lawsuit, or even one not thoroughly investigated at the inception, did not constitute malice as required by the tort

of malicious prosecution.

The crux of the Court's determination was its perception regarding the impact countersuits would have if an attorney could be held liable for negligence. Noting that an attorney is primarily an advocate whose assistance makes the guarantee of free access to the courts meaningful, the Court was unwilling to allow a physician to utilize the countersuit to limit the zeal of the advocate in representation of his client's interest. Likewise, the absence of presuit investigation is, under current rules and procedure, the rule and not the exception, and proceeding to trial with a weak case was not, according to the Court, any evidence of malice. Instead, the Court stated that the allegation of filing a weak suit and not undertaking pretrial investigation is at most an allegation showing that "the defendant went to trial with a poor case and got his just desserts—he lost. That, as a matter of public policy, is not malice."

The "notable exception" mentioned above appeared in the case of *Drago vs Buonagurio*.²⁰ In that case Mrs. Buonagurio, as executrix of her husband's estate, named Dr. Drago as a defendant in a suit for \$1,500,000 when in fact Dr. Drago had never seen her husband as a patient during the illness which caused his death, and had not treated him directly or indirectly during his fatal illness. The doctor claimed that he had been named indiscriminately in a "shotgun" suit in order to get discovery, and that it had resulted in mental anguish and defamation of character.

The Trial Court dismissed the doctor's complaint, but the Appellate Court reversed even though the complaint did not state a claim for malicious prosecution, abuse of process, or negligence.

Unlike the majority of appellate courts, the Court recognized a cause of action for "prima facie tort" because the complaint alleged a cause of action for an intentional and wrongful act without justification, the foreseeable consequence of which was harm to the instant plaintiff.²¹

The continuing validity of *Drago* is questionable. Two other New York Appellate Courts have refused to expand unsuccessful patients' and their attorneys' liability beyond the doctrines of malicious prosecution or abuse of process, and have rejected the doctrine of "prima facie tort" as a theory of recovery.²²

The Appellate Courts of Tennessee have yet to address the physician's countersuit. Until they do, questions decided by the other jurisdictions

remain open. Is a physician limited to claims of malicious prosecution or abuse of process, or does an attorney owe a general duty to the public and the defendant physician to refrain from *filing* a suit without reasonable cause to believe that malpractice has been committed? Does an attorney owe a duty of due care to the physician to refrain from *maintaining* a suit after it has been filed if investigation will not support a reasonable belief that the allegations of medical incompetence are accurate?

While those questions are undecided, if Tennessee elects to adhere to the majority rule limiting the countersuit to the theories of malicious prosecution or abuse of process, then several points are clear.

There are two tort actions that may be brought to obtain redress for the alleged misuse of judicial process:²³

1. *Abuse of process*, which is the use of legal process to obtain a result it was not intended to effect; and
2. *Malicious prosecution*, the employment of legal process for its ostensible purpose, but where the defendant, with malice, has initiated legal proceedings without probable cause, and it had terminated in favor of the instant plaintiff.

There is a heavy burden of proof on the plaintiff in malicious prosecution actions to establish malice and the lack of probable cause.²⁴

In addition, Tennessee has a long-standing rule that where the advice of counsel has been honestly sought and all material facts relating to the case, ascertained or ascertainable by the exercise of due diligence, had been presented to counsel, and a suit has been commenced in pursuance of that advice, the plaintiff is immune from damages for malicious prosecution.²⁵ While there is some requirement of investigation, the requirement extends only to that which a prudent man would undertake before filing suit.²⁶ It does not contemplate exhaustive analysis, nor will the courts ever compel a dissatisfied patient to seek independent expert advice in advance of filing suit.

Though no one can predict whether Tennessee will adhere to the majority rule and limit physician countersuits to malicious prosecution or abuse of process theories, or will expand them to include general negligence theories, there can be no question that the courts must face manifold public policy considerations in

making that decision.

On the one hand, Tennessee has a long-standing constitutional tradition of free and open access to the courts to all private litigants. This access has already been infringed upon by the presence of the Medical Malpractice Review Board,²⁷ and any court will be sensitive to expanding the collective legal rights of physicians vis-a-vis members of the public. Likewise, the policy of free and open access to the courts is made meaningful only through the intervention of an attorney, and that attorney, as an advocate, has a primary duty to his client to zealously represent him through any legally permissible means and a right to seek the judgment of a court on any claim.

Arrayed against these interests is the continued perception that a large number of the medical malpractice suits initiated are without merit and are designed merely to forestall payment of an unpaid bill for health service or as a means of extorting a settlement from the physician's insurance carrier. Combined with these commercial considerations is the fact that any physician sued for malpractice may suffer severe mental distress and substantial damage to his professional reputation in the eyes of current and potential patients. In addition, none of the purported "reforms" adopted in response to the crisis in the early 70s has had any demonstrable impact upon the cost of health care or the volume of medical malpractice litigation. If, indeed, a substantial number of the claims leading to suit are frivolous and without merit, and if the countersuit would lead to a reduction in a number of meritless or strike suits, the countersuit may well reduce the shift in resources from the provision of health care to the defense of past health care afforded, may lower professional negligence insurance premiums, and ultimately retard the increase in cost of health services to the public.

Whatever the ultimate resolution made by the courts, the countersuit implicates a number of important personal and professional choices.

Whether or not the courts adhere to the majority rule or expand the theories of recovery, no physician or surgeon should ever file a countersuit before the termination of the initial malpractice action. The absence of a favorable termination of the prior suit would preclude success based upon a theory of malicious prosecution, and would likely increase the difficulty of the defense of the initial malpractice action by a

quantum leap. Once notified of the claim against the patient's attorney, the attorney's malpractice carrier would retain skilled counsel to protect the attorney's interests. That same attorney would protect the defendant attorney by bolstering the initial case against the physician, and in many cases the attorney retained by the attorney's insurance carrier would be far more skilled and competent in professional negligence litigation than the original attorney.

Likewise, the interests of the profession should be considered before a countersuit is filed. One man's vindication could lead to another's continuing nightmare. While I do not mean to suggest that attorneys should enjoy immunity from civil suit for their actions, the threat of a countersuit may lead an attorney who would otherwise be willing to convince his client to dismiss a case with prejudice, thus concluding the litigation, to delay the ultimate termination of the suit in order to protect himself from liability for malicious prosecution. In addition, the very same mental anguish, loss of time and income, and injury to professional reputation that may stem from the initial malpractice case, may well continue throughout the preparation and litigation of the subsequent countersuit.

This summary treatment of a broad subject deals with but a few of the considerations that must be addressed before a physician elects to prolong judicial evaluation of the treatment afforded to a patient in the past. While the countersuit may meet the physician's understandable need for vindication, and may function as a quality control device for a lawyer just as medical malpractice suits function with respect to health care, the countersuit is at best only one answer to the continuing medical malpractice controversy; it is certainly not the solution.

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Stat Ann §65-4901 (Supp 1976); La R S §40:1299.47 (West Supp 1977); Md Ann Code, Courts and Judicial Proceedings, §3-2A01 (Michie Cum Supp 1976); Mass Gen Laws Ann ch 231, §60B (Supp 1977); Vernons Ann Mo Stat §538.015 (Supp 1977); Neb R S §44-2480 (Supp 1976); Nev R S §41A.010; NM Stat Ann §58-33-14 (Interim Supp 1976); NY Jud Law §213(8) (McKinney Supp 1976); Ohio Rev. Code Ann §2711.21 (Supp 1977); Pa Stat Ann title 40, §1301.301 (Supp 1977); RI Ann Stat §5.37.1-1 (Bobbs-Merrill Supp 1976); Tenn Code Ann §23-3401 (Supp 1977); Va Code Ann §8-911 (Supp 1976); Wis State Ann §655.02 (Supp 1976).

3. TCA §23-3415; Fla Stat Ann §768.50.
Prendergast vs Nelson, 199 Neb 98, 256 NW 2d 657 (1977); Ohio Rev Code Ann §2307.43.

3. TCA §23-3415; Fla Stat Ann §768.50.

4. From September 1977 until February 1978 the writer attempted to survey operational performance of the malpractice screening panels. Of the states repeatedly contacted, five whose panels are run by independent administrative offices failed to reply at all, and the information supplied by the independent offices responding was so incomplete as to be valueless. Solicitation of the same information from those states without independent administrative offices was largely a matter of fruitless trial and error.

The data supplied by Paul F Abrams in (1977) *Pa Report of the Administrator for Arbitration Panels for Health Care*, at 4, and in a report of the *Institute of Judicial Administration, Medical Malpractice Panels in Four States* (1977), with respect to New York, indicate that the panels have enjoyed demonstrable success in those states.

5. 3 *Malpractice Lifeline*, Sept 25, 1978.

6. 372 NE 2d 685 (Ill App 1978).

7. 372 NE 2d at 688.

8. *Id.*

9. Alder, *Malicious Prosecution Suits as a Counter Balance to Medical Malpractice Suits*, 21 Cleveland L Rev 51 (1972); Note, *Physician Countersuits: Malicious Prosecution, Defamation and Abuse of Process as Remedies for Meritless Medical Malpractice Suits*, 45 Cincinnati L Rev 604 (1976).

10. 372 NE 2 at 690.

11. 264 NW 2d 76 (Mich App 1978).

12. 264 NW 2d at 78.

13. *Berlin; Lyddon vs Shaw*, n 6, *supra*; *Spencer vs Burglass*, 337 So 2d 596 (La App 1976); *Pantone vs Demos*, 375 NE 2d 480 (Ill App 1978); *Hill vs Wilmott*, 561 SW 2d 331 (Ky App 1978); *Gasis vs Schwartz*, *supra*, n 11; *Wolfe vs Arroyo*, 543 SW 2d 11 (Tex Civ App 1976).

14. 561 SW 2d 331 (Ky App 1978).

15. 561 SW 2d at 333.

16. 561 SW 2d at 334.

17. The notable exception is *Drago vs Buonagurio*, *infra* n 20.

18. *Wolfe vs Arroyo*, 543 SW 2d 11 (Tex Civ App 1976).

19. 3 *Malpractice Lifeline*, Sept 25, 1978.

20. 402 NYS 2d 250 (App Div 3rdD 1978).

21. 402 NYS 2d at 251.

22. *See, Belsky vs Lowenthal*, (App Div 1978), 3 *Prof Liab Rptr* 28 (Aug 1978), *Hoppenstein vs Zemek*, 403 NYS 2d 542 (App Div 1978).

23. *Donaldson vs Donaldson*, 557 SW 2d 60, 62 (Tenn 1977).

24. *Kauffman vs A H Robins Co*, 223 Tenn 515, 448 SW 2d 400 (Tenn 1969).

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The State Bureaucratic Swamp: How it Works and the Drums it Marches To

EUGENE W. FOWINKLE, M.D., M.P.H.

The title of this presentation reflects the impression most physicians have of state government and the state health bureaucracy, and in many ways government and the bureaucracies do resemble jungles and swamps. State government, including state health agencies, can be unpredictable and hazardous. However, don't despair, there are rules of the jungle which are predictable, and with the use of certain skills and strengths even jungles and swamps can be made useful. I'll discuss some of those rules and skills.

The swamp, as foreboding as it might seem, also has certain describable characteristics, not all of which are bad. And, yes, there are drums to which we must attempt to march in the state bureaucratic swamplands. I'll try to describe some of those noises and how they influence our behavior.

First, I should point out that there is not one swamp—there are 50 swamps. Even though there are many similarities, there are also many differences from state to state. I'll try to stick to those points which are generally applicable, but I'll probably miss the mark for a few states.

What are some of the rules of the jungle or realities which we face in state government?

Reality Number 1:

As the level of governmental expenditure for health care increases, the level of public influence on health policy formulation increases. Furthermore, a large part of the responsibility for implementing mechanisms to assure public input into health policy befalls the state health agency. Witness the role of the state in PL 93-641, the State Health Coordinating Council, Certificate of Need, rate setting, etc. So, state government has been assigned a major role in public policy formulation, and the job is neither

easy nor pleasant.

Reality Number 2:

People are concerned about the high cost of health care. True, there are good and justifiable reasons that health care costs have increased so dramatically, but the high level of public concern is still a reality which should not be considered lightly. State health agencies are being assigned increasing responsibilities and are being given clear mandates to try to control health care costs. Couple this with the tax revolt which is beginning to impact upon state health programs, especially Medicaid, and you can see the difficulty facing the state health agency in the area of cost containment.

Reality Number 3:

Loud cries about fraud and abuse and low-quality health care fill the air. Some are justified—some are not. But there is no question that there is a high level of public attention on fraud, abuse and quality. Again, state government has a major responsibility, both by federal design and state legislative action.

Of course, there are many other realities with which the state health agency must deal, and I could go on listing them, but I believe the point has been made that some of the biggest problems we face in health care are thrown to state government to solve.

How does the state health bureaucracy address these and the multitude of other problems it is assigned to tackle? In other words, what are its major roles?

In an article I wrote for the *Proceedings of the Academy of Political Science*,¹ I describe four major roles which I see as functions appropriately performed by state health agencies. They are (1) quality control, (2) administration of third-party reimbursement programs, (3) policy influence, and (4) service delivery. I believe it is indicated to discuss these major roles briefly so you can have a better feeling of what goes on

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down in the depths of the state health bureaucratic swamp.

First let me discuss *quality control*. In every state some agency is charged with the promulgation and maintenance of standards for health care delivery and for environmental quality in both the public and the private sectors. This responsibility includes licensure, annual registration and enforcement of standards of practice for numerous types of health care professions—physicians, nurses, dentists, chiropractors, podiatrists, optometrists, nursing home administrators, and so on. The quality control role also includes licensure and certification for Medicare and Medicaid reimbursement of hospitals, nursing homes, ambulatory care operations, home health agencies, and other types of health care facilities and institutions. This function entails an overall responsibility for sanitation, fire safety, quality of staffing, quality of patient care, accuracy of records, and fiscal accountability in the facilities participating in federal and state payment programs.

Also included in the state's quality control role are monitoring emergency medical services, proficiency testing, and overall quality assessment of medical laboratories. In the area of environmental services, the state generally has an important role in monitoring and enforcing quality standards for air, water, solid waste disposal systems, sanitation, and working conditions. The exercise of the quality control function is generally applied to the health agency's own operations and personnel as well as to those of all other health care entities.

Through this role the state has regulatory authority for all private practitioners who must be licensed, all facilities that must be licensed and certified for federal reimbursement, and all potential sources of environmental pollution or hazardous working conditions. This means that most (if not all) providers of health services are subject to some degree of influence by state health agencies. Consequently, this quality control role has a great impact on determining the types and quality of all health services.

A second major role of state health agencies is the *administration of third-party reimbursement* programs, such as Medicaid. There can be little doubt that the manner in which Medicaid funds are spent exerts considerable influence on a state's health delivery system. The importance of Medicaid expenditures on the health system can be illustrated by the fact that about 70% of the operating budgets of Tennessee's nursing homes

come from Medicaid. This means that the care of at least 70% of the state's nursing home patients is completely subject to federal and state regulation of quality of care and of fiscal procedures. We can conclude that the nursing home industry almost completely depends on the exercise of this function of the state health department. In addition to Medicaid, a number of other medical assistance programs are administered within state government. These programs include crippled children's services, payment for renal disease treatment and kidney transplants, and payment for hemophilia care—only to name a few.

It is apparent, then, that the state does exercise a major influence on the health care delivery systems through quality control and through third-party reimbursement programs. This reality, combined with many other forces and functions, defines a third major role of state health agencies—*health policy influence*. Activities such as data gathering and analysis, standard setting for public health service delivery programs, evaluation and impact assessment of health services, planning and coordination among public and private health agencies and providers, legislative advocacy at all government levels, resource allocation, and encouraging other appropriate segments of the health system to provide needed health services all influence health policy.

The fourth major role of state health agencies is the *direct delivery of services*—those provided from the state level directly to individuals, agencies, or institutions and those provided by regional and county agencies. Such activities include issuing copies of vital records, laboratory services, and services provided by the state where gaps exist in the local health care system, such as the operation of primary care clinics in rural or inner city areas. And, of course, direct services include the more "traditional" public health tasks, such as immunizations and family planning.

Now, having described some of the realities impacting state health agencies and some of the major roles of those agencies, I should point out that it is my observation that health organizations, such as state medical associations, often fail to give adequate priority to assuring that there is competence in their state health agencies. The importance of competency in the state health bureaucracy to the future of health care in this country should not be underestimated and physicians should work to assure that it is there.

Now, what about the drums, the noises which

BUREAUCRATIC SWAMP/Fowinkle

influence our behavior?

Consider this senario:

At 8:15 my office phone rings. It is one of the legislative floor leaders. He says, "One of my constituents operates a nursing home and can't make ends meet on the rate you pay for Medicaid patients. Why don't you pay them a reasonable rate?"

At 8:45 on the phone is another of the legislative powers. He says, "A friend of mine wants to build a nursing home. Doc, will you help him get a certificate of need?"

At 11:00 I appear before the Joint Finance Ways and Means Committee. "Doctor, the cost of running the Medicaid nursing home program is increasing 25% per year. Can't you control the cost of that program?"

So, you see the problem we constantly face is that of incompatible or conflicting objectives. On the one hand, we are asked to do more and on the other we are told to spend less. The bureaucracy, then, is viewed as obstructive if it does not respond positively and extravagant if it does. The life of the state health bureaucrat is filled with this type of conflict. Consequently,

nobody likes a bureaucrat. We must settle with trying to be disliked equally by everyone.

I hope this brief presentation has enabled you to understand some of my perspectives on life in the "bureaucratic swamp." While it may appear to be on the surface a life filled with constant conflict and trouble, there are some important challenges and there are rewards in achieving needed changes.

I will conclude with a quote from John Gardner, a former Secretary of Health, Education and Welfare, from his book *No Easy Victories*:

For our generation there is no such thing as life without trouble. But there are good kinds of trouble and bad kinds of trouble.

The bad kind of trouble stems from apathy, stagnation, the kind of hypocrisy that refuses to admit the existence of problems, the kind of vested interest that prevents needed institutional change. The good kind of trouble comes from being on the move, from being acutely aware of problems and I might add working hard to solve them. . . .²

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Drug-Resistant Pulmonary Tuberculosis

CHARLES E. KOSSMANN, M.D., Editor

RICHARD B. EVANS, M.D.:

A 66-year-old white man was committed by the Tennessee State Health Department to the City of Memphis Hospital for the treatment of pulmonary tuberculosis which was first diagnosed in 1943. In the following 35 years the patient had multiple admissions for tuberculosis but always left the hospital against advice before completing a course of treatment. Most recently he was hospitalized in another city where six cultures of the sputum were positive for *Mycobacterium tuberculosis*. Antituberculous drugs to which two dilutions of the cultured organisms were tested for sensitivity revealed complete resistance to isoniazid, rifampin, and para-aminosalicylic acid, and partial resistance to streptomycin and ethambutol. The only drug to which the organism was sensitive (no growth in culture dilutions of 10⁻³ and 10⁻⁵) was ethionamide. Isoniazid given at the hospital was discontinued when the liver function tests indicated hepatic toxicity.

Symptoms on admission were periodic hemoptysis and chronic cough productive of green, tenacious sputum. The physical examination revealed an emaciated white man in no acute distress, with a slight elevation of temperature. Breath sounds were decreased over the right upper lobe, and dry rales were heard in the right axilla. The remainder of the examination was unremarkable.

A roentgenogram of the thorax showed bilateral upper lobe infiltrates, the right greater than the left, and minimal cavitations. Urinalysis was negative for acid fast organisms. The hematocrit was 47% and the white blood cells were 6,300/cu mm with a normal differential count. A drug susceptibility test again showed the organism to be sensitive to ethionamide but resistant in variable degree to five other agents (Table 1).

Current medications are isoniazid 300 mg qd and pyridoxine 200 mg qd; capreomycin 1 mg IM qd; cycloserine 250 mg bid; and ethionamide 250 mg qid.

HARRY L. DAVIS, M.D.:

This patient, with pulmonary tuberculosis for

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City of Memphis Hospital Case No. 631846. Presented Feb. 15, 1978.

over 30 years, has been unusually noncompliant. In trying to judge why, I have arrived at the conclusion that he is basically not a troublemaker but a person who simply cannot discipline himself to stay in the hospital, and leaves impulsively and repeatedly. In order to treat drug-resistant tuberculosis, it is necessary to have the patient's cooperation. This patient is cooperating at present because he has been quarantined and is in the security ward of the John Gaston Hospital. His therapy is further complicated by the fact that he has shown evidence of both renal and hepatic toxicity, because of which we are using smaller doses of drugs than we might under somewhat different circumstances. These doses may be increased in the future if it appears that he can tolerate them.

It is important to understand that in drug-resistant tuberculosis resistant strains are present prior to the initiation of any therapy in a patient who has at least moderately advanced disease. These strains are selected out or allowed to "emerge" through the therapy. In other words, the organisms do not change; they are simply resistant at the outset and survive the therapy to which they are resistant. Even with all of the

TABLE 1
INDIRECT DRUG SUSCEPTIBILITY TEST
ON THE M. TUBERCULOSIS OF PATIENT (FEB. 1978)

Drug	Dilution of Culture	
	10 ⁻³	10 ⁻⁵
Control	++++	++
INH (0.2 µg/ml)	++++	++
SM (2.0 µg/ml)	++++	++
EMB (7.5 µg/ml)	+++	+
PAS (2.0 µg/ml)	++++	++
ETA (10.0 µg/ml)	—	—
RIF (1.0 µg/ml)	++++	++

— = no growth
+ = 51 to 200 colonies
++ = more than 200 colonies but not innumerable
+++ = innumerable but not confluent growth
++++ = confluent growth

antituberculous drugs in use today, the problem of resistance may be encountered. Most authorities take a rather dim view of ever having a drug that will not lead to the emergence of resistant organisms under some circumstances.

The resistance studies that are routinely performed at the Tennessee State Health Department Laboratory involve six drugs: isoniazid (INH), streptomycin (SM), ethambutol (EMB), ethionamide (ETA), rifampin (RIF) and para-aminosalicylic acid (PAS). Table 1 shows the drug resistance of the cultured strain in this patient. Growth of his organism is roughly equal to the control growth on the different drugs with the exception of ethambutol, and the only drug on which it does not show any growth is ethionamide. So of the five principal first-line or major drugs that we use in the therapy of tuberculosis, his organism is resistant in some degree to all. Also, the state laboratory in the past has used a formula to estimate the percentage of resistance; that is, the ratio of the number of colonies on culture with the drug over the number of colonies on the control plate. The state microbiologists have made the statement that when more than 1% of the colonies on the control culture grow on the drug, then resistance to that drug is imminent, and that particular drug may not be effective.

In order to understand how resistant organisms emerge in patients with tuberculosis, it is useful to review the work of Canetti and his colleagues^{1,2} at the Pasteur Institute in Paris. Relative to the magnitude of bacterial populations in patients with pulmonary tuberculosis, Canetti estimated that patients with latent infections had relatively few organisms, sometimes less than 100, whereas in the hard core foci the number of organisms tended to be in the 100 to 10,000 range. In cavitary disease many more organisms would be found, the number being directly related to the extent and severity of the condition. He postulated that if the number of organisms was below 1×10^6 there would be few resistant organisms among them and resistance to drugs would not be a problem. In cavitary disease there will be many more organisms, thousands of which will be drug-resistant mutants which could escape destruction if the patient is not treated properly.

To recapitulate, it is probably safe to treat a patient with latent infection with one drug as is done prophylactically with isoniazid because it is very unlikely to encounter resistance. But if you have a patient with cavitary disease or far

advanced disease, he is very likely to have resistant organisms. Almost certainly these will emerge from the lesion if only one drug is used or even if two drugs are used, one of which is not very potent, such as PAS. Much of the resistance to streptomycin, I am sure, occurred in the days when streptomycin and PAS were the principal drugs available; PAS simply was not good enough to suppress the strains resistant to streptomycin. With advanced cavitary disease, organisms which are resistant to two or more drugs may very well persist in the lesion and the sputum. Dr. White, Dr. Sutliff and I at the University of Tennessee Hospital have recently reviewed 149 cases which we consider "hard core." Of the 149 cases, 77, or 53%, had organisms with some degree of drug resistance when tested in vitro—51% to streptomycin, 13% to isoniazid. The degree of resistance was quite significant, being approximately one half that of the control growth.

Therapy of Drug-Resistant Tuberculosis

I would like to talk for a few minutes concerning the therapy of tuberculosis,³ especially therapy designed to prevent the emergence of drug-resistant organisms. We have five major drugs that we consider first-line drugs. Isoniazid and rifampin are essentially bactericidal against the tubercle bacillus. Ethambutol is an excellent drug. Streptomycin has been an excellent drug and was the very first one we had available. PAS is really not a very good drug but did help to some degree to prevent the emergence of resistant organisms in patients with tuberculosis during the years when we had no other drug. It is not used much in the treatment of adult tuberculosis today. Combined isoniazid and ethambutol have been, up to now, a standard regimen but at the present time the State Health Department and tuberculosis authorities all over the world are showing much more interest in using isoniazid and rifampin together in the therapy of previously untreated cases of tuberculosis, especially in young individuals. We are now engaged, along with several other institutions in the United States, in a study sponsored by the Communicable Disease Center in Atlanta to evaluate the short-term use of isoniazid and rifampin in patients with tuberculosis. The theory is that if you can hit the disease hard with two potent drugs in the very beginning, drug-resistant tubercle bacilli usually will not persist in the lesion simply because the two drugs will take care of

organisms resistant to either alone. This may go a long way in preventing the development of drug resistance, and using a shorter course of chemotherapy may encourage patient cooperation. Our only concern is that both isoniazid and rifampin are hepatotoxic drugs. If the patient develops evidence of hepatitis it may not be possible to tell which drug is the offender, and further therapy may be complicated. This has not been a serious problem thus far in the patients we have treated with both drugs.

As in the patient presented today, when resistance to many of the first-line drugs is encountered, it becomes necessary to resort to second-line drugs which are definitely less effective. We do have several second-line drugs which can be used: pyrazinamide, ethionamide, cycloserine, capreomycin, viomycin and kanamycin. This patient has been placed on capreomycin and cycloserine in addition to ethionamide. Isoniazid has been continued so that he is on four drugs at the present time, which may or may not be justified. Someone who has organisms with such a high degree of resistance and who is being treated with second-line drugs probably needs to be given at least two drugs that he has never had before, an important principle in the re-treatment of patients with tuberculosis. We have tended to use isoniazid even though the organism shows some resistance to it. Whether this is desirable can be argued. Clinically, it has been our impression that even though the in-vitro studies show some resistance to isoniazid, it is still useful in treating the resistant cases. Perhaps this shows some lack of confidence in the in-vitro testing of these drugs, but I think we have been in general agreement here in Memphis in this regard. Sometimes we will increase the dose of isoniazid up to as high as 10 mg/kg/day which we did not do in this patient because of the possibility of liver toxicity. We have been somewhat cautious with capreomycin also because of a rising BUN. His creatinine at the present time is normal, however.

Primary Drug Resistance

Primary drug resistance is defined as resistant organisms isolated from patients who have not been previously treated with any of the anti-tuberculous drugs. One of the two better studies that I have reviewed on primary drug resistance is that of Canetti and associates² in which they studied 11,643 strains from untreated patients in France and in French speaking countries in

Africa. Resistance to one or more of three drugs studied was found in 9.8%; 7.6% were resistant to streptomycin, 4.3% to isoniazid, and 1.7% to PAS. Of the total group, 6.8% had organisms resistant to one drug, 2.2% to two drugs, and 0.8% to three drugs. In a similar study in this country from about 1961 to 1969, Doster and associates⁴ at the Communicable Disease Center obtained 9,380 strains from untreated patients and found that 3.5% were resistant to one or more drugs. This lower incidence compared to the French study² would suggest that primary resistance is less of a problem in this country than in France although one would have to compare carefully the technical details of these two studies in order to arrive at that conclusion. Two interesting features came out of these investigations on which both were in agreement. First, the incidence of primary resistance did not increase over the years in which the studies were conducted. Second, in both there was evidence that the younger patients were the ones who tended to yield organisms with primary resistance. The explanation for this is not completely clear but it was a consistent observation in both studies. Perhaps this finding is related to the fact that the younger individuals have been infected at a later point in time and, therefore, are more likely than the older individuals to have organisms with primary resistance.⁵

Prevention of Drug Resistance

The most important step in preventing drug resistance is always to treat active tuberculosis with more than one drug. This is the sine qua non of preventing drug resistance—use at least two drugs always, both of which are potent anti-tuberculous drugs. I don't believe any advantage in using three drugs has been clearly proven. Evidence collected in recent years indicates that three drugs are not often better than two drugs as long as the two drugs are potent.

There should not be any interruption of drug therapy, as happened several times in the patient presented today, a feature of this case which encouraged the emergence of strains resistant to the various drugs used. Close watch should be kept on the clinical response of the patient. Often by observing the clinical and radiologic response of the patient, one can predict that organisms are emerging that are resistant to the drugs being used. If you don't get the type of response expected within three to six months of drug therapy,

Continued on page 909

W. BARTON CAMPBELL, M.D.

An 80-year-old woman was admitted to St. Thomas Hospital for evaluation of substernal pain of two hours' duration. She had been a known diabetic for 20 years and had a history of hypertension. One year prior to admission she had severe chest pain and was thought to have sustained a myocardial infarction. The CPK rose to a peak of 544 (upper limits of normal 120). Although she had no cardiomegaly on chest x-ray she developed orthopnea and paroxysmal nocturnal dyspnea, and Lanoxin 0.125 mg/day orally was started. Shortly prior to this admission she had recurrence of her paroxysmal nocturnal dyspnea. Chest pain on the day of admission was not relieved by nitroglycerin. On examination the blood pressure was 180/70. She had an S-4 gallop. An electrocardiogram was obtained (Fig. 1).

Electrocardiogram shows a normal sinus rhythm with a rate of 64 per minute. The PR interval is prolonged at 0.24 seconds. The P waves are inverted in V_1 and are broad and notched in standard lead II. This finding is compatible with left atrial enlargement.¹ There are Q waves in lead AVF of .04 seconds' duration. The QRS complex is slightly widened at 0.10 seconds. The intrinsicoid deflection is .05 seconds. The R wave in AVL is 12.5 mm. The J point and ST segments are slightly elevated in leads III and AVF. The T waves are inverted in all leads except III and AVR.

A large number of criteria have been advanced to evaluate the presence of left ventricular enlargement. Criteria which are highly specific lack sensitivity, and criteria which are sensitive (a low number of false-negatives) contain more false-positives. The point score system of Romhilt and Estes² provides reasonable balance between specificity and sensitivity and is used in this institution for the diagnosis of left ventricular enlargement. These criteria are shown in Table 1. Left ventricular enlargement is present if 5 or more points are present. "Probable" left ventricular enlargement is considered present with 4 points. In addition to the above criteria an R wave in AVL of 12 mm or more is a highly specific (although insensitive) criteria for left ventricular enlargement.³

The QRS amplitude in Figure 1 is insufficient in any given lead to suggest left ventricular enlargement. (The tracing is correctly standardized but standardization does not appear in the photograph.) However, the patient does have delayed intrinsicoid deflection (1 point), widened QRS complex (1 point), evidence of left atrial en-

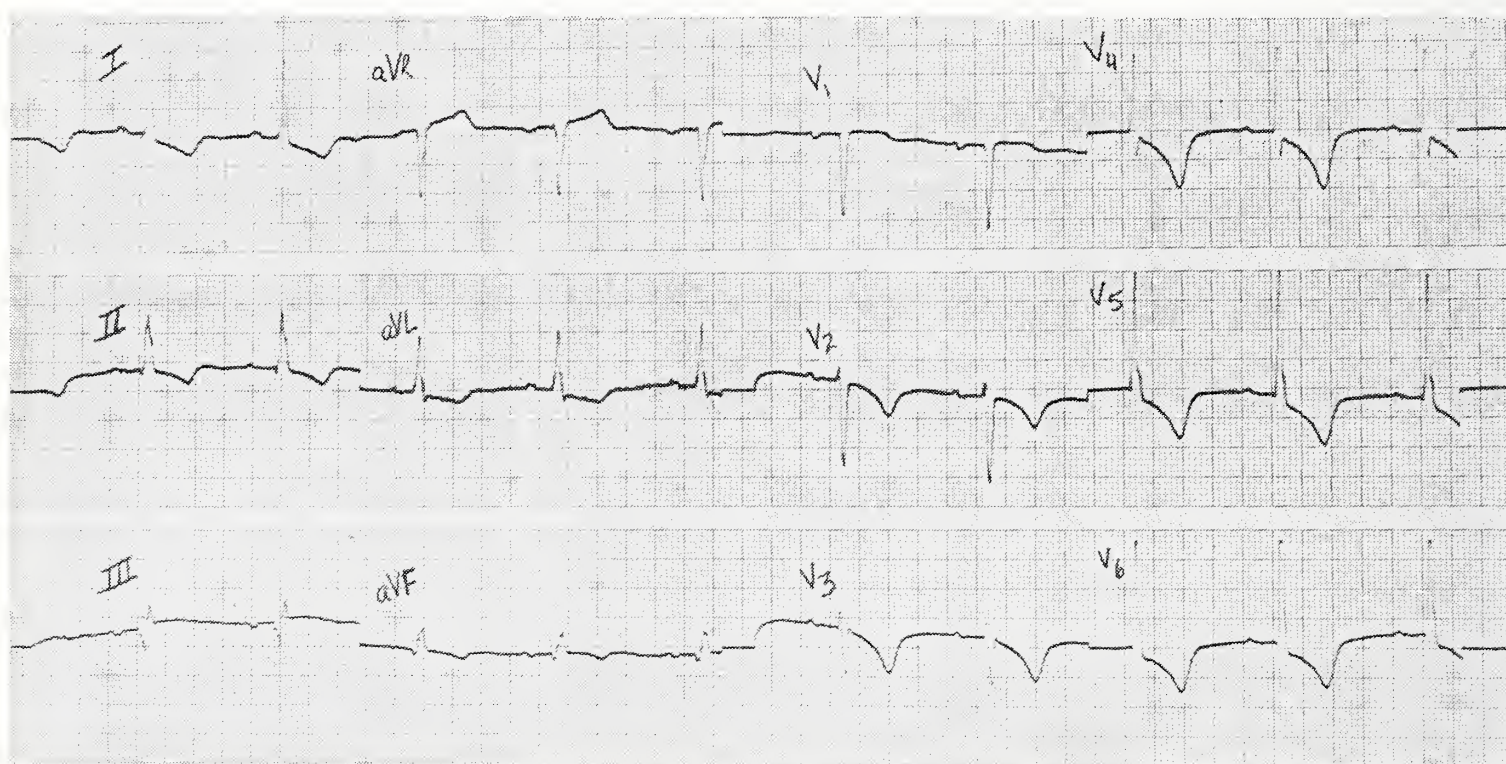


Figure 1

From the Department of Cardiology, St. Thomas Hospital, Box 380, Nashville, TN 37202.

TABLE 1
ROMHILT-ESTES POINT SCORE SYSTEM²

	Points
1. Amplitude of the QRS complex positive if any one of the following is present: A. Largest R or S in limb leads greater than 20 mm. B. SV ₁ or SV ₂ greater than 30 mm. C. RV ₅ or RV ₆ greater than 30 mm.	3
2. ST-T segment positive if the left ventricular strain pattern with an ST-T vector opposite to the mean QRS vector is present: Without digitalis With digitalis	3 1
3. Left atrial enlargement positive if terminal P force in lead V ₁ is abnormal.	3
4. Abnormal left axis deviation positive if the left axis of the QRS complex is leftward and superior at 330°.	2
5. QRS duration greater or equal to 0.09 seconds. (QRS duration must be less than 0.12 seconds in order to exclude bundle branch block.)	1
6. Intrinsicoid deflection positive if the intrinsicoid deflection in lead V ₅ or V ₆ is greater or equal to 0.05 seconds.	1

largement (3 points) and ST-T segment changes in the presence of digitalis (1 point). Left ventricular enlargement is present (6 points) utilizing the Romhilt-Estes criteria.

Q waves in AVF are considered diagnostic of inferior wall infarction if they (1) are 0.04 seconds or more in duration, (2) have an amplitude of 25% of the R wave.⁴ In this patient the ST segment elevation in III and AVF is also compatible with inferior wall infarction.

FINAL DIAGNOSIS: Left atrial enlargement. Left ventricular enlargement with ST-T wave changes. Inferior infarction of indeterminate age.

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Medical Grand Rounds . . .

Continued from page 907

resistant strains should be suspected and searched for.

Frequent follow-up of these patients to make certain that they continue their drugs is very important. I think that the studies that are now in progress with respect to short-term therapy with isoniazid and rifampin may ultimately make a significant impact by encouraging better patient cooperation and by obtaining earlier sputum conversion. Both possibilities have the potential of preventing the emergence of drug-resistant organisms.

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MYRON LEWIS, M.D.; CHARLES FRANKUM, M.D.; and STEPHEN GAMMILL, M.D.

A 65-year-old woman complained of vomiting, generalized abdominal pain and distention for three weeks, and constipation for one week prior to admission. She had lost three pounds during the previous week. One year previously a diagnosis of diverticulosis coli had been made, and her uterus had been removed in the past. Physical examination was within normal limits. Provisional diagnoses were diverticulosis coli and functional bowel syndrome secondary to stress (her husband had suffered a recent gastrointestinal hemorrhage). Barium enema showed diverticulosis coli and there was a suggestion of a pelvic mass on an excretory urogram. Pelvic sonography was interpreted as abnormal in that a 9 x 10 cm mass was believed to have been present within the pelvis. Following this report, a repeat pelvic examination was performed but again no mass could be felt. Computerized axial tomography was then done and two representative films are shown in Figures 1 and 2. Please examine these figures and choose the most accurate diagnosis.

- (1) Normal study
- (2) Fluid-filled bowel in the pelvis
- (3) Cystadenocarcinoma of the ovary
- (4) Pelvic sarcoma

Discussion

Following the CAT scan, a third pelvic examination was performed, but again a mass could not be felt. The case was then discussed thoroughly among the clinical and radiological staff as it was felt that a mass measuring 9 x 10 cm should be palpable on pelvic examination. Finally a decision was reached to explore the pelvis surgically.

At operation, a mass measuring 9 x 10 cm lay within the pelvis. It was soft, pliable and easily movable, and had a gelatinous consistency. It was resected in toto, and the pathologic diagnosis was cystadenocarcinoma. The patient was discharged in good condition.

Even though the ultrasonic examination showed the mass, in this case it was confusing because of the normal physical examination. The CAT

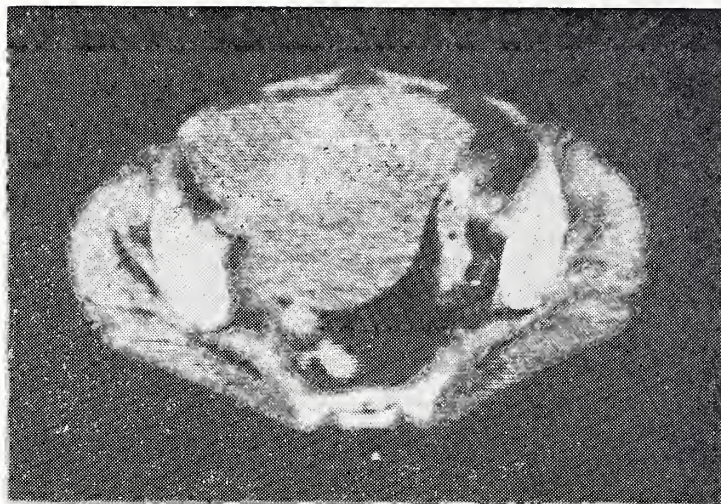


Figure 1

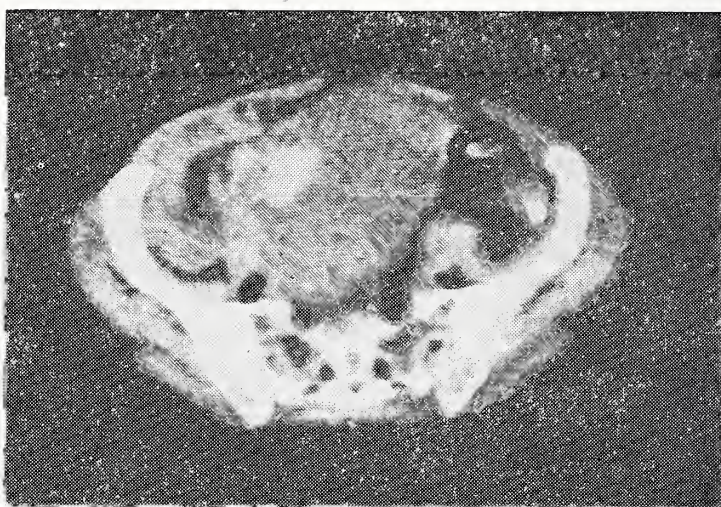


Figure 2

scan was so convincingly abnormal that the normal physical examination had to be ignored and a decision made accordingly to operate on the patient. Apparently the mass could not be felt because of its soft, pliable gelatinous consistency. The diagnosis of cystadenocarcinoma (rule out cystadenoma) was made from the CAT scan because of the septations visible within the mass in both Figures 1 and 2.

FINAL DIAGNOSIS: (3) Cystadenocarcinoma of the ovary.

From the Department of Radiology, Baptist Memorial Hospital, 899 Madison Ave., Memphis, TN 38146.

Stress Workshops Assist Clergy

Ministers are called upon to counsel parishioners in times of stress, yet they themselves are often subject to many of the same work-related, personal, and interpersonal stresses that affect today's general population. Therefore Chaplain Faith Cornwall, director of Pastoral Services at Middle Tennessee Mental Health Institute (MTMHI), set up a day-long "Stress Control" workshop for area clergy and ministers in training, in which ministers from Middle Tennessee were invited to participate. Attendance was limited to 40 participants, but response was such that a second workshop was scheduled.

A total of 77 clergy from Nashville and surrounding counties attended the two events, whose leaders were Ronald J. Check, Ph.D., chief psychologist at MTMHI, and Mary Frances Hall, Ph.D., consultant to MTMHI and other institutions. Doctors Check and Hall both received doctorates in psychology from Vanderbilt, and have presented several similar workshops in various MTMHI sections and for the general public at the Nashville YMCA. In addition, Check has appeared on Nashville's *Noon Show* TV program to discuss various forms of stress and ways to cope with and control them.

By breaking stress down into its component parts, the pair of psychologists make the complex phenomenon more easily understood and managed. The MTMHI workshop was designed to review sources of stress, reactions to stress, and strategies for coping with stress. It began with each participant writing a cause for stress on a blackboard, which served to introduce members of the group to each other and to initiate discussion.

Early in the program the leaders made the distinction between distress and eustress, the first of which is encountered in difficult situations; the second arises from a pleasant situation. As part of the effort to individualize the session, a self-evaluation questionnaire designed to discover sources of stress in his recent life events was given to each participant. This was followed by analysis and discussion of the questionnaire to

expand awareness. Some sources of stress often overlooked were demonstrated and discussed. These often include the effects on the body of maladaptive personal habits such as excessive eating, underexercising, poor selection of diet, and inadequate sleep. Videotape feedback was used to help participants pinpoint habits of posture, locomotion, and associated sources of stress.

Stress control is viewed as a skill by Check and Hall, and therefore can be taught. While very aware that they would not produce experts in a one-day distilled version of a course that usually runs for 15 hours over a six-week period, they gave pointers in some of the short-term techniques for reducing stress, such as proper breathing, tightening and then relaxing muscles, and simpler remedies such as taking a walk or listening to music.

One significant factor of the course deals with the technique of teaching self-control. A person cannot always control what happens to him, but he can often gain control of his reactions. Among the cognitive techniques introduced were suggestions for specific positive self-statements regarding stressful situations—the feeling of arousal that may accompany stimulus can be labeled "fear" or "extra strength to deal with a situation" by identifying the sensation and labeling it for maximum adaption, so that coping can become easier.

Controlled breathing is one technique that many graduates find very useful. Another is bioenergetic muscle flexing as described by Alexander Lowen—exercises that uncoil the body from tension. Participants were provided supplemental information in the form of articles and other related materials.

Evaluation by participants indicates the workshops met a real need. There were requests for additional workshops, and Chaplain Cornwall plans to continue the collaborative effort with MTMHI psychologists. By providing an ongoing series of personal growth experiences for ministers, she plans to meet a need while further developing the friendly working relationship between mental health workers and community clergy.

From the Tennessee Department of Mental Health and Mental Retardation, Nashville, TN 37219.

How We Stand the Cold

FRANK CHAPPELL

Human beings are essentially semi-tropical animals. Our bodies at rest and unclothed are designed to maintain their internal temperature effortlessly with the thermometer at about 85 F. But built into us are effective methods of coping with much lower temperatures.

We achieve cold-weather comfort in part by generating more heat in our internal furnaces, and in part by conserving that heat.

The American Medical Association points out that the most important source of internal heat are the muscles. They use about 70% of the food energy they consume, at work or at play, in heat generation. Under average conditions, body muscles produce enough heat to boil a quart of freezing-cold water every hour—and when you wave your arms or stomp your feet while waiting in the cold, you are stoking your muscles' furnaces to a still higher level of heat production.

The extent to which muscular activity enables you to ward off the cold has been strikingly illustrated by the experiments of Canada's National Research Council, which show that the amount of clothing needed to keep you comfortably warm when you're sitting quietly at 70 F will also keep you warm at 40 F if you're walking briskly—or at -5 F if you're running.

If you don't ward off the cold by exercising voluntarily, your muscles take over and warm themselves by shivering involuntarily. Under extreme conditions of exposure, intense shivering may even save you from freezing to death. "It's largely shivering which explains why many are cold but few are frozen," one physiologist has said.

Since your muscles need to produce more heat in winter, they use up more food energy; but nature makes the allowance for this by turning up your appetite a few notches in cold weather. On the average, you eat about 15 calories more per day for every one-degree drop in the temperature. Soldiers allowed to eat as much as they please when stationed in the tropics at 92 F selected a

diet totaling about 3,000 calories daily; in the Arctic or Antarctic at -25 F, their calorie intake rises spontaneously to nearly 5,000.

Your tastes for particular foods also change during cold weather. Explorers report, for example, that men who carefully trim all fat off their meat back home crave and eat much of this prime source of heat on polar expeditions.

Instead of increasing your heat production in cold weather, you can achieve much the same result by conserving what heat there is. One simple method of heat conservation is familiar to everyone. When you're cold, you instinctively curl up into a ball, thus cutting much of the surface area through which your internal heat is dissipated.

Less familiar are your automatic blood and skin changes. Ordinarily, the blood and skin act as a cooling system like the water and radiator of your car. Hot blood emerging from the internal organs is cooled by flowing through the skin at the rate of 50 to 75 gallons an hour. When you're chilled, however, many small blood vessels in your skin close up, reducing the rate of flow to one fifth of normal, so that your body "turns pale with cold." The net effect of this bloodflow restriction is to convert your skin from a radiator for dissipating heat into a blanket for conserving it.

The efficiency of this skin blanket depends in part upon the thickness of the fat layer beneath it. In general, people with well-distributed fat deposits survive extreme cold better than their thinner fellows, which may explain why most successful channel swimmers have been generously upholstered. But fat people aren't necessarily more comfortable in the cold; for the nerve endings which complain "I'm cold" to the brain are themselves located near the surface of the skin; they may actually end up colder than the thin man's—and sending out more insistent messages of complaint—if they are insulated from internal sources of heat by layers of fat.

These skin nerve endings, incidentally, appear to be superior in design to most similar devices

Mr. Chappell is the Science News Editor, American Medical Association.

developed by engineers and scientists. They are sensitive to sudden changes in temperature. When you step outdoors on a cold day they signal the change to your brain immediately, long before your skin has actually chilled to an uncomfortable level. And when you've been outdoors in the cold long enough so that heat production and heat loss are in balance, they send an "I'm comfortable" message to the brain even though their actual temperature has dropped off half a dozen degrees.

Conserving body heat depends in part on the materials with which your body or clothing makes contact. Thus the tile floor of your bathroom feels colder than the bathmat to your feet, even though both are the same temperature; heat flows more rapidly from your skin to a good heat conductor like tile.

Quiet air, fortunately, is a poor conductor of heat—much poorer than water, for example. The human body, which maintains its heat balance without effort in still air at 85 F, requires water at over 90 F for a similar balance. A man may die after 60 minutes in ice-cold water; he can live much longer in air at the same temperature. Wool socks and boots keep your feet warm at sub-zero temperatures while they're dry; but if water seeps in, your toes will soon start to numb. The mother who steps outside for a minute to determine how cold it is, then bundles 5-year-old Billy up in layers of wool before sending him out to play, is not being a thoughtful, cautious mother. She has forgotten that outdoor air feels much colder than it is when you first step into it. And she has forgotten that Billy is going to run and jump, thus increasing his internal heat production many times over. As a result, Billy is soon perspiring in his heavy togs. He sits down to rest. His internal heat production falls while his heat loss increases due to the dampness of his clothing. Billy comes home with teeth-chatter, chilled to the bone. "I should have put an extra sweater on him," his mother tells herself.

A wiser mother sends a child out for strenuous play in relatively light clothing, but with adequate protection for his hands and feet; and she'll remind him to come in for something warmer if he begins to feel cold.

Still air is an excellent insulating material, but moving air quickly carries heat away with it. Even a breeze blowing at five miles an hour carries away about eight times as much body heat as still air. The winter uniform of a soldier, for example, loses about a quarter of its insulating

efficiency when he's walking briskly rather than standing, because breezes are generated within his clothing which carry off heat.

The loosely tailored sealskin and walrus-skin clothing of the Eskimos is nearly ideal for cold weather. When an Eskimo chases his quarry in a hunt, the chill Arctic air flows into and out of his flapping garments to prevent overheating. Later, when he sits down to rest, his clothing settles around him and achieves an insulating efficiency hard to surpass.

Most of us think of wool as ideal for heat conservation, and scientific studies have confirmed its excellence. The insulating effect is not achieved by the fibers themselves but by the air trapped among the fibers. Wool's superiority to cotton in this respect is due largely to its springiness. Damp or dry, it tends to regain its thickness more readily after compression, and to trap some more air. The suitability of some synthetic fibers for cold-weather use depends similarly on their ability to spring back into shape when compressed by bodily movements.

Fur also insulates by means of the dead air trapped among the hairs; and many animals are able to regulate their heat balance by expanding or compressing their fur. They achieve this effect by means of tiny muscles which erect the hairs and thus thicken the furry layer when the animal begins to chill. We human beings, though we lack fur, still have the same hair-erecting muscles in our skin; and these muscles still contract when we're suddenly chilled, producing goose pimples.

Understanding of the importance of thickness in clothing has enabled scientists to improve gloves for Arctic wear. Our fingers are partially curved most of the time, yet glove manufacturers tailor gloves to fit the fully extended hand. As a result, ordinary gloves are compressed to a fraction of their normal thickness at the joints and knuckles where our fingers bend—and heat leaks out. Military gloves, to minimize the compression, are now shaped to the natural curve of the relaxed fingers.

Keeping warm while asleep offers a particular challenge, for internal heat production falls during sleep. No doubt you have more than once had the experience of falling asleep in a comfortably heated room and awakening to find that you're cold and shivering. The room hasn't chilled while you slept; instead your heat production has dropped. It's therefore wise to cover yourself when you lie down to take a nap even

though you're sure you won't need it.

Electric blankets may seem like an exception to the general rule that bedding and clothing are designed to conserve your own internally generated heat; an electric blanket feels as if it were actually sending heat to your skin. But this is an illusion; such a blanket rarely reaches the temperature of your skin. Like any ordinary blanket, what it really accomplishes is to slow down the loss of your internal heat. The chief advantages of the electric blanket are three. It warms itself, so that you don't have to curl up and shiver in order to warm it initially from your own inner heat resources. It provides a maximum of heat conservation with a minimum of weight. And a good electric blanket adjusts itself automatically to changes in outer temperature, so that you don't have to add a blanket or take one off as the air around the bed chills or warms.

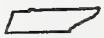
How much cold can the human body survive? Dorothy Mae Stevens was found unconscious, almost unclothed in a Chicago alley one winter morning in 1951. She had apparently lain there all night and her internal temperature had fallen to 64.4 F—34 degrees below normal. The hospital to which Miss Stevens was taken saved her life through good nursing care and the use of stimulants, blood plasma, oxygen, antibiotics, anti-blood-clotting drugs, pressure bandages and other medical methods. More astounding was the 1955 case of 2-year-old Vickie Davis, who survived after being found unconscious in her night clothes with an internal temperature of 60 F.

Naturally the adverse effects of exposure to severe cold when the body and clothing are dry are less severe than when wet. It makes a big difference.

All water doesn't freeze at the same temperature. Ordinarily fresh water freezes at 32 F while ocean water, which is salty, freezes at 27.9 F. An article in the *British Medical Journal* stated that a sailor falling into the Arctic Ocean had no chance of survival.

If you're caught in sub-zero temperatures and reach shelter chilled to the bone with nipped fingers, toes, cheeks, nose or ears, what should you do about it? Don't follow the ancient suggestion to rub the frostbitten parts with snow or ice. Recent research has shown that the immediate application of gentle warmth leaves you with less tissue damage and less likelihood of infection or gangrene. The victim should be brought into a warm room as soon as possible, given a warm drink, and either wrapped in warm blankets or else placed in a tub of warm—not hot—water. Water is faster, for just as you lose more heat from your body in cold water, so your body absorbs heat more rapidly from warm water. Too much heat should be avoided: don't use a heat lamp or hot-water bottle; don't expose frostbitten areas to a hot stove. And don't rub or massage a frozen finger, toe or ear; but after the part is warmed, encourage the victim to exercise his fingers and toes.

The best approach to frostbite, however, is to prevent its occurrence in the first place. Dress warmly enough. Dress *dryly* enough. Exercise to keep warm, especially your toes and fingers. Don't drink alcoholic beverages or smoke during or immediately before severe exposure. And don't be one of those foolhardy heroes who haven't sense enough to come in out of the cold.



APRIL 1979						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
			TMA 144 TH ANNUAL MEETING Airport Hilton Inn—Memphis			
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	NOTES				

For Whom the Polls Toll



JOHN B. DORIAN

**President's
page**

The holiday season gives us pause for reflection, for introspection. Emotionally, it is the year's high for most, though for some the low. Most every human emotion is manifest at this time. It is a time of yearning and receiving, a time of overeating and overspending. We reflect on what we accomplished and resolve that which will improve our lives. Warmth, serenity, compassion, and Gelusil all contribute to the tranquility of the season. It is truly a season for children of all ages.

By way of introspection, we, as a profession and as individuals, might contemplate our experience and our hopes. We have performed well; we can and must achieve more. The latest Harris poll indicates that physicians have dropped in public esteem by 13% from the previous poll. Most other groups stayed about the same, except for the news media, where public confidence *increased*.

Surely, the poll is not infallible, and I would not presume to try to relate that finding to individuals in the medical profession. Nonetheless, when the pollsters indicated over the years that ours was the most respected group, I never hesitated to quote them. It is, therefore, not intellectually possible to dismiss the current findings. Why, then, the change in public esteem?

Almost daily, a colleague mentions to me some compromise in ethics by a physician. I believe that there is a connection between these comments and Mr. Harris' findings. I also believe that, in our holiday introspection, we must be objective in relation to our shortcomings.

Our professional ethics impose upon each of us an element of conscience not expected of any other group in society. Our consciences, our sense of moral judgment are established by the time we graduate from medical school. If there is an appreciation of right and wrong at that time, our moral judgments are predictable for the future of our professional lives.

In all areas of professional activity, and especially in medicine, there are numerous opportunities for compromise or abandonment of tenets that are ingrained in character. Indeed, it has been said that without a conscience a license to practice medicine is a license to steal.

Much of the criticism I hear from *within* the profession concerns fees. Perhaps, again, there's some correlation between these comments and our image. Here, I speak in terms of introspection and reflection that are private, and that ask ourselves if some of today's fees are unreasonable, or maybe immoral, or possibly obscene.

In the fee-for-service principle that we espouse, we have a moral obligation to relate the fee to the service. Our profession is unique in society in having the ability to improve the quality of life, while maintaining control of our personal destinies. The numerous moral dilemmas of 1978 involve grave judgments on our part daily. Issues regarding euthanasia, abortion, genetic research, dying, and "test tube babies" have been approached reasonably and intelligently by our profession. These dilemmas and our fee controversy similarly involve conscience, moral and medical judgment, and ethics. The contrast is equally apparent. I believe that society has a joint responsibility in the solution of the dilemmas, but that the profession should be responsible for our fee mechanism. We may be in the process of abdicating that responsibility. Will peer pressure be sufficient? Society will not wait much longer for us to demonstrate leadership and reason in regard to fees.

Some might justify (or rationalize) fees on the basis of the wage-price controls which unjustly and unwisely targeted physicians in 1971. A few may have resolved not to get "caught short" again. Morally, such a thought process cannot be justified. No physician's standard of living was compromised, no real hardship resulted. It was for me, probably like most others, a maddening inconvenience, and nothing more.

In our seasonal joy, we need remind ourselves of the enormity of our blessings. In an imperfect world, we collectively have the most and the best of "the good life." We have an obligation in conscience to justify our membership in the finest profession in the world.

Sincerely,

John B. Dorian, M.D.
PRESIDENT

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DECEMBER, 1978

editorials

Big Doings for a Small Planet

*The magic of the microscope is not that it makes
little creatures larger, but that it makes a large one
smaller. . . . The microscope takes us down from
our proud and lonely immensity and makes us, for
a time, fellow citizens with the great majority of
living things.*

—Asher E. Treat
Mites of Moths and Butterflies

Time-lapse photography is today a familiar part of our culture, but just after World War II, when much of our present technology was just developing, it was a fascinating and exciting novelty. I very laboriously put together at Vanderbilt some of the first time-lapse photomicrographic equipment in the country, and as one of

the early electron microscopists said of his gadgets, it was like dope. You got addicted to it. Used with the phase microscope, you could really get inside a cell and follow its moving parts as hours collapsed into seconds. The value of the microscope is not that it makes little things big, but that it makes big things little.

The other day I saw on TV a film of the exhibit of Claude Monet's paintings held last year at the Art Institute of Chicago. I spent a whole afternoon at that exhibit, just barely seeing the nearly 200 magnificent paintings in it. The film looked at some of the paintings with Monet's eyes—water lily by water lily, brush stroke by brush stroke. It was rather like my time-lapse films as it went at dissecting the artist's work. But only a few parts of a few paintings. To get inside a cell and discover its secrets, to get inside the artist's mind and watch his hand translate his retina's image to canvas—that requires both time and commitment.

I just recently returned from the exciting Eastern Mediterranean Cruise sponsored by TMA. I saw a lot of four countries—Greece, Turkey, Israel, and Egypt. I saw a lot, but it was almost nothing. What can you know of Israel, for example, with a day in Jerusalem and a day in Galilee? I made more pictures in those two days than Monet painted in his entire life, yet it is a small fraction. But Jesus walked the 70 miles from Galilee to Jerusalem six times during his ministry. That's how you know a country. It requires a lifetime, viewed close-up.

Our earth is only a small planet circling a minor star in one of multiplied billions of galaxies. What can God know of this speck of dust in His vast universe, let alone the insignificant life-forms on it? How can He even see our world? By getting inside it, that's how. By climbing the rocky hills of Jerusalem, by walking the dusty Galilean roads. By sleeping under the olive trees in Gethsemane beneath the starlit Judean sky. By sailing the Sea of Galilee 200 feet below sea level, or climbing 1,900-foot Mount Tabor, or kneeling in the synagogue at Capernaum. By stumbling up Golgotha. It takes time, and it takes commitment.

The secret is not in making small things big, but in making big things small. Even God.

Merry Christmas.

J.B.T.

The Death of a City

Last spring it dawned on me that this year of our Lord 1978 marks the centennial of an im-

portant event in Tennessee history—the death of a city. It has been said that in 1878 Memphis ceased to exist as a riverfront city. It exists today as something quite different.

It was obvious that event should not go unnoticed by the JOURNAL, as the cause of that death and rebirth was medical, and so I approached Simon Bruesch, M.D., professor of Anatomy in the medical school at Memphis and a noted medical historian, about writing a history of the Memphis yellow fever epidemic of 1878. He has furnished what appears to be the definitive work on that epidemic, medically speaking.

Dr. Bruesch notes that most previous writings on the epidemic have dealt primarily with its socioeconomic consequences, and often contain medical inaccuracies which he has corrected. One particular inconsistency has been the names of the very large number of physicians who died in the epidemic. He has taken considerable pains to produce an accurate list.

As the manuscript contained over a hundred pages, it was obviously too long to publish in a single issue. I was given the option of cutting it as necessary, and it was arranged so that whole sections could be dropped. It hangs together as a unit, though, and each part is important, so that I have elected to publish it in installments in three consecutive issues of the JOURNAL.

J.B.T.

Litigation Contemplation

In my military experience there was constantly lurking in the background a more or less clandestine and often only vaguely perceived but nevertheless real semi-organization referred to as the WPPA. During my early days in service as the “juniores” medical officer around I had the distinction of being designated Base Medical Inspector, which gave me the privilege of nosing about squadron latrines and kitchens and organizing predawn “short arm” inspections. Once or twice it brought me into conflict with the aforementioned organization, but as most of the fly-boys—even many of the top brass—were AUS or reserve, not many of them, at least overseas, came under the WPPA, or “West Point Protective Association,” so I was generally spared.

Less clearly defined, and perhaps not even verbalized, but nevertheless real to attorneys and plaintiffs, even though imaginary to us, has been what I shall refer to as the PSPA. There has always been a general complaint by attorneys that they could never find a physician who would testi-

fy against another one. They envisioned a “Physicians and Surgeons Protective Association.” I do not propose to discuss here the merits of their case, but only point out that other oxen sometimes get gored.

About a year ago a case widely regarded as a landmark case gave great aid and comfort to us beleaguered doctors. It was the “Berlin Case” in which a jury awarded compensatory and punitive damages to Dr. Leonard Berlin for a “frivolous” malpractice suit against him. Last month that decision was reversed by an Illinois Appellate Court, causing Dr. Berlin to comment, paraphrasing a comment by Justice William Howard Taft (whose quote I do not have), that “It is impossible to deny that judges are men—and also lawyers.” So there is also an LPA.

Other countersuits have fared no better. According to the courts, the crux of the matter is that all citizens should have free access to the courts, and that lawyers represent that access. Just as a physician’s first duty is to his patient, an attorney’s first—and by custom, nearly sole—duty is to his client. It is not required that he do any sort of extensive research to determine prior to his filing a lawsuit whether or not his client has a valid case “other than what any prudent person would do to protect himself.” This, said the courts, is after all for the courts to decide. The plaintiff attorney owes the defendant nothing!

We carry in this issue of the JOURNAL an article written by a member of a law firm with a long and illustrious history of physician defense. The article goes into the background of and the legal thinking behind the Appellate Court’s decision, and explains why countersuit will never afford more than very minor relief to our litigation problem. It also gives some very practical advice to be followed should you contemplate court action. In short, for your protection, you should read and digest that “memorandum.”

J.B.T.



Charles M. Armstrong, age 76. Died October 11, 1978. Graduate of University of Tennessee School of Medicine. Member of Knoxville Academy of Medicine.

Guy Sydney McClellan, age 72. Died November 9, 1978. Graduate of University of Tennessee School of Medicine. Member of Nashville Academy of Medicine.

Henry N. Moore, age 69. Died October 11, 1978. Graduate of University of Tennessee School of Medicine. Member of Consolidated Medical Assembly of West Tennessee.

Otha Horace Yarberry, age 83. Died October 31, 1978. Graduate of University of Tennessee School of Medicine. Member of Sevier County Medical Society.

new members

The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY

*Aristides L. Boiser, M.D., Chattanooga
Murrell O. Clark, M.D., Chattanooga
James Edward Eyssen, M.D., Chattanooga
Michael B. Meyer, M.D., Chattanooga
Thomas Edward Moses, M.D., Chattanooga
Arthur J. Von Werssowetz, M.D., Chattanooga*

CUMBERLAND COUNTY MEDICAL SOCIETY

*David W. Litchford, M.D., Crossville
Larry D. Reed, M.D., Crossville*

MAURY COUNTY MEDICAL SOCIETY

*Charles A. Ball, M.D., Huntsville, AL
John A. Draper, Jr., M.D., Atlanta, GA*

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY

*Sue C. Atwood, M.D., Memphis
Hoi Jine Bang, M.D., Memphis
William Landess Bourland, M.D., Memphis
Brian Michael Cohen, M.D., Memphis
William H. Flanagan, M.D., Memphis
Daniel Eugene Griffin, M.D., Memphis
Ronald T. Harris, M.D., Memphis
Guy Hirsch, III, M.D., Memphis
Panduranga Jallepalli, M.D., Memphis
Thipavan Kongtawng, M.D., Memphis
Charles M. McGahey, M.D., Memphis
Christine T. Mroz, M.D., Memphis
Vincent Dee Smith, M.D., Memphis
Edwin Oscar Taylor, M.D., Memphis
Anne Colston Wentz, M.D., Memphis
Leonidas Nicholas Vieron, M.D., Memphis*

McMINN COUNTY MEDICAL SOCIETY

Renuka Soni, M.D., Etowah

NASHVILLE ACADEMY OF MEDICINE

*Michael R. Bishop, M.D., Nashville
John F. Edland, M.D., Nashville
Howard S. Kirshner, M.D., Nashville
David H. Morgan, M.D., Brentwood
Carlos A. Muhletaler, M.D., Nashville
Arthur J. Nussbaum, M.D., Nashville
Edgar H. Pierce, Jr., M.D., Nashville
Richard D. Pinson, M.D., Nashville*

*David Rabin, M.D., Nashville
Robert G. Satterfield, M.D., Nashville
Stewart A. Shevitz, M.D., Nashville
Samuel A. Smith, M.D., Nashville
Rena M. Thomison, M.D., Nashville*

WASHINGTON-CARTER-UNICOI COUNTY MEDICAL ASSOCIATION

J. Gordon Gregory, M.D., Clarksville

personal news

The American College of Cardiology has granted Fellowship status to the following physicians: *George M. Krisle, III, M.D., Knoxville; Frank A. McGrew, III, M.D., Memphis; and William L. Russo, M.D., Memphis.*

Thomas K. Ballard, M.D., Jackson, was installed as president of the Tennessee Academy of Family Physicians at its annual assembly held in Gatlinburg, Nov. 1-3, 1978. Other members elected to office during the meeting were John O. Williams, M.D., Mt. Pleasant, president-elect; Duane C. Budd, M.D., Johnson City, vice-president; and Oscar M. McCallum, M.D., Henderson, reelected secretary-treasurer.

Frederic Tremaine (Josh) Billings, M.D., Nashville, was honored by the Vanderbilt University School of Medicine, Department of Medicine, during "Josh Billings Day," with a reception and dinner at the University Club on Oct. 20, 1978. Dr. Billings, a member of the Vanderbilt Medical School faculty and staff since 1939, is a graduate of Princeton University, was a Rhodes Scholar in 1936 and received his medical degree from Johns Hopkins University. The guest speaker during the dinner was Roger O. Egeberg, head of the DHEW Office of Health and Scientific Affairs, whose topic was "Medicine Today and Tomorrow: the View from Washington."

Joseph M. Bistowish, Jr., M.D., Metro Health Director, received the Distinguished Service Award of the American Association of Public Health Physicians during its annual meeting in Los Angeles. Dr. Bistowish, a past-president of the organization and a member of the advisory committee to the DHEW for the past two years, was honored for his contributions in the health field, for his involvement in national health projects, and for several health-related programs he has administered.

Dorothy Brown, M.D., Nashville, clinical professor of surgery at Meharry Medical College, has been appointed to the National Heart, Lung and Blood Institute Advisory Council.

William Francis, M.D., Cookeville, has been awarded one of the Tennessee Technical University's 1978 Distinguished Alumni Awards in recognition of his service as team doctor for the school's athletic teams.

James B. Helme, M.D., has been appointed the medical director of the Tennessee State Prison and

Hospital in Nashville. Dr. Helme has resigned from his medical directorship of the Nashville Drug Treatment Center.

Oscar M. McCallum, M.D., Henderson, was elected Family Physician of the Year by the Tennessee Academy of Family Physicians at its annual assembly in Gatlinburg. Dr. McCallum is a past-president of the TAFP, is currently serving as secretary-treasurer, a position he has held for seven years, and is a member of the AAFP Commission on Scientific Affairs.

Dr. McCallum was also honored by the Henderson Civitan Club on Oct. 9, 1978, when he was named the Chester County Citizen of the Year for 1978. The Good Citizenship Award plaque was presented to Dr. McCallum, saluting his service and leadership as a family physician, as well as his activity in civic service and governmental affairs as a member of the Henderson Lions Club and the county court.

G. J. Tarleton, M.D., Nashville, has received the Community Service Award from the Hillcrest Seventh-day Adventist Church. Dr. Tarleton was chairman of the Department of Radiology at Meharry Medical College from 1949 until his retirement in 1977, and he is a member of St. Pius Catholic Church, a Knight of St. Gregory, and a member of the Alpha Phi Alpha Fraternity and the Agora Assembly.

programs and news of medical societies

Nashville Academy of Medicine

The board of directors of the Nashville Academy of Medicine has announced that Raymond Schklar, assistant executive director, will succeed John Westenberg as executive director of the Academy. On Jan. 1, 1979, Westenberg will assume the position of assistant vice president for medical affairs at Vanderbilt University.

medical news in tennessee

UT College of Medicine Names New Associate Dean

Dr. Stewart Lewis Nunn, Memphis, has been named associate dean for clinical affairs of the University of Tennessee College of Medicine in Memphis. A professor of medicine in the College and chief of the Cardiovascular Disease Section of Veterans Administration Medical Center, he was named associate dean by Dr. James C. Hunt, who joined the College as dean on July 1. Dr. Nunn worked closely with Dr. Hunt during Nunn's 12 years at

Mayo Clinic in Rochester, Minn. Hunt was with the Mayo Clinic 24 years and was chairman of its Department of Medicine for five years.

THA Announces New Board Officers

Sister M. Rita, O.S.F., executive director of the two St. Joseph Hospitals in Memphis, has been installed as the new chairman-elect of the board of trustees of the Tennessee Hospital Association. She is the first woman ever elected to the top board position of the THA. Earl Skogman, president of East Tennessee Baptist Hospital in Knoxville, has been installed as chairman of the board of the Association for the 1978-1979 year. Colonel W. W. Elledge, administrator of Woods Memorial Hospital in Etowah, will serve this year as immediate past chairman of the board and speaker of the house of delegates.

national news

From the AMA's Office in Washington, D.C.

Congress Cans Carter Creations . . .

After a bizarre 48-hour-long swan song, the 95th Congress frantically adjourned leaving dead in its ashes most of the Carter administration's major health proposals.

The leading casualty among the health bills was a hospital cost containment measure. Unexpectedly gaining Senate passage in a watered-down fashion late in the session, the administration and its congressional leadership pulled out all stops to whisk it through the House. But strong opposition by a number of House members who refused to be stampeded and the concerted effort of the American Medical Association, the American Hospital Association, and other health groups kept the President's much wanted measure from passage.

The rebuff to the administration was a smashing victory for health care providers, including the AMA, and was especially sweet to the nation's hospitals which had been subject to bitter tirades from Health, Education and Welfare Secretary Joseph Califano. "Obese," "lazy," "bloated" were adjectives hurled at the hospitals by Califano, who also labeled the Voluntary Effort (VE) to bring down hospitals' costs as a "sham and an imposter."

Also left in the paper rubbish on the Hill were the Child Health Assessment Program, clinical laboratory regulations, drug law reform, and a rewrite of the health planning law, the latter gaining a second one-year extension.

Sen. Herman Talmadge's (D-Ga.) carefully worked plan to reshape Medicare-Medicaid reimbursement for hospitals through prospective reimbursement also received the ax in the turmoil of the adjournment.

Two provisions sought by the AMA also failed when the bills to which they were attached became

mired. One of the AMA proposals would have repealed section 227 of the Social Security Act placing a limit on the reimbursement of teaching physicians. Approved by the Senate as a part of the Hospital Cost Containment Bill, it was never attached to another suitable vehicle after the hospital bill was doomed in the House. Another AMA-backed initiative would have amended the Professional Standards Review Organization (PSRO) law to protect PSRO data from disclosure under the Freedom of Information Act. The Senate could not get around to this provision which was made part of a Medicaid assistance bill which died because of time limitations.

The \$56-billion appropriations bill for the Labor and Health, Education and Welfare Departments passed after adoption of compromise language covering federal funding for Medicaid abortions. The Health Services Bill containing authorizations for many public health service programs such as mental retardation and teen-age pregnancy did clear the Congress. A provision for aid to hospitals to set up primary care centers was reduced to a demonstration program while the Health Maintenance Organization program was extended, but with less funding than the administration sought. Aid for biomedical research also was approved and sent to President Carter.

... And NHI Comes a Cropper

An angry confrontation took place on Capitol Hill when the AMA met head-on with Sen. Edward M. Kennedy's (D-Mass.) proposal for national health insurance (NHI). The AMA charged that the Kennedy-Labor scheme for NHI would bring about total federal domination of health care in this country.

"We do not find such a program to be in the interest of the citizens of this country," said James Sammons, M.D., executive vice president of the AMA.

William Felch, M.D., chairman of the AMA's Council on Legislation, told Kennedy: "The total federal takeover of the health care system is inescapable under this program. In our opinion we do not think the American public will want its health care directed and controlled by the federal government. The history of federally run programs does not instill such trust and confidence as to support such action."

The confrontation took place before Kennedy's Senate human resources subcommittee on health on the second day hearings on the outline of a new NHI plan recently proposed by Kennedy. At the opening session, Kennedy heard from six people from Canada who had severe medical problems and from six Americans. He contrasted the high out-of-pocket costs to the Americans with the total government payment of the costs in Canada, declaring that "if these differences between the United States and Canada don't move the people of this nation, then nothing can. . . ."

The hearing was described by Kennedy as "the first serious congressional debate on national health

insurance. It will last for many months. It will be carried to every part of this nation."

Dr. Felch noted that Kennedy's plan would impose strict controls on hospitals and physicians through revenue and expenditure limits on hospitals and revenue limits on physicians.

"Manifest is the inherent unfairness of subjecting one industry to stringent cost controls without likewise controlling the factors that affect the costs in that industry," said Dr. Felch. "It is grossly inequitable to single out a segment of our society and economy for discriminatory controls. This on its face would be objectionable."

The heart of the Kennedy-Labor proposal sets national maximum budget levels of expenditures for health care together with similar maximum areawide and state budgets. Hospital budgets and physician fee schedules would be negotiated annually.

This budgeting process would be controlled through a new federal agency called the "Public Authority," which would attempt to make the health system learn to live within a budget, Dr. Felch said. "The inescapable result of such a budget is 'rationing' of health care," he warned.

"The point is we agree with you that health care costs must be kept in reasonable balance, but we urge the Congress not to fall into the 'cost containment trap'—the belief that cost control is more important than the allegation of human misery and suffering."

Dr. Sammons told Kennedy that the AMA shares the concern of proponents of NHI proposals that health care should be available to all persons. He pointed out that the AMA developed a bill in the 95th Congress—the Comprehensive Health Care Insurance Act—that provides comprehensive and catastrophic coverage for all persons, and is founded on the strengths of its existing health system. "Its foundation is solidly based upon the successes of our entire health delivery system, allowing for future development and innovation," Dr. Sammons said.

The AMA official testified that during the long period of NHI debate a number of significant changes have taken place in the health system. These include a marked increase in numbers of medical schools; a significant expansion in medical graduates; a substantial increase in training of allied personnel; a proliferation of medical facilities; development of sophisticated technology; wider distribution of medical personnel; expansion of government-supported health programs; increased access to care by the disadvantaged; and wider coverage of private health insurance, including catastrophic coverage.

"Thus while the debate has waxed and waned, our health delivery system has shown steady improvement," he said.

The AMA witnesses' appearance was marked by several sharp exchanges with Kennedy. The senator took issue with Dr. Sammons' statement that Kennedy's bill would result in a total federal takeover. The witness suggested that Kennedy read his bill again.

Kennedy also complained about the AMA's assertion his bill would lead to rationing of health

care. Dr. Sammons replied that when fixed budgets and ceilings are established, coupled with increased demand, somewhere along the line there will be people who are not receiving services.

Dr. Sammons told the subcommittee that while there are drawbacks in U.S. health care, it is "superior to any other in the world."

Clobbering Carter Colleagues . . .

The rupture between the Carter administration and organized labor on NHI goes unrepaired.

HEW Secretary Califano refused to accede to Labor's demands that the administration tailor its NHI plan to Labor's scheme. The crucial difference is Labor's insistence that NHI be implemented in one fell swoop; the administration wants it done in stages.

Califano earlier told the Senate human resources subcommittee that "The President believes that a program this complex—affecting the nation's third largest industry which employs 6% of the entire work force and having profound implications for federal, state, and local budgets—must be phased in with singular care and sensitivity to the economy, governmental budget and the administrative complexity of the health care system."

Califano also indicated the Labor-Kennedy plan would be too costly, pointing to the \$30.8-billion addition to the federal budget by 1983 contemplated by the plan, a figure soft-pedaled by the Labor forces. "We all want the costs of a national health plan to be 'tolerable,' but the American people obviously must know specifics before they can reach a conclusion," said Califano.

. . . Who Cheer Volunteer Cost Cap

The Voluntary Effort has received support from two high Carter administration officials. During a meeting of the National Steering Committee on Voluntary Cost Containment in Washington, D.C., Barry Bosworth, chairman of the Council on Wage and Price Stability, and Robert Strauss, special counsel to the President, said that President Carter "wanted us to come here today to encourage you in your efforts to contain health care costs." Although the administration failed to obtain enactment of hospital cost containment legislation, Strauss said the administration recognizes the significant progress of voluntary programs in the fight against inflation.

Bosworth said both he and Strauss were "eager to work with the VE on a cooperative basis." Hospitals are "one of the very few industries in which deceleration (of the rate of inflation) has succeeded," Bosworth said, "and this is significant considering the rate of inflation in the rest of the economy." He added that "the design of the Voluntary Effort addresses the unique problems of its own field better than any other industry the Council on Wage and Price Stability has seen."

Bosworth recommended strengthening the VE by

screening the performance of individual hospitals, taking into account local conditions and differences. He added, however, "the program would be more effective with teeth behind it in the form of standby controls."

Following the steering committee meeting, Paul Earle, executive director of the VE, announced at a press conference that the rate of growth in hospital expenditures during the first seven months of the year was 12.8%—the lowest rate since 1974. "The decrease in the rate of increase in hospital expenditures by 2.8% (from 1977) indicates a trend which shows that the VE goal of a 2% reduction will definitely be accomplished this year," Earle said.

James Sammons, M.D., executive vice president of the AMA, told those at the press conference that the medical profession is totally committed to the VE, outside as well as inside of hospitals. Physicians have been reducing the rate of escalation of fees, Dr. Sammons said, noting that many medical societies have established commissions on the cost of medical care. "A call for moderation in the rate of physicians' fees by Tom E. Nesbitt, M.D., AMA President, has been widely supported," he noted. Dr. Nesbitt was commended by the VE committee for his effort.

Dr. Sammons said the AMA has been meeting corporate leaders to discuss cost factors in health care provisions and noted that the AMA has just issued a cost containment kit to its constituent medical societies.

Alexander McMahon, president of the AHA, and Michael Bromberg, executive director of the FAH, predicted that the next Congress will be even more resistant to federal hospital control proposals because of the success of the VE.

"The success of the Voluntary Effort in containing hospital costs was the single most important factor in winning Congress' support in the fight against any form of the administration's proposed hospital revenue caps," said McMahon.

. . . But President Pushes to Pass Price Plug

President Carter has singled out the health care sector for special attention in his new wage-price guideline plan to dampen inflation. While calling for the economy as a whole to "decelerate" wages and prices by one half of a percentage point, the chief executive said the increase of medical care costs should drop by two percentage points per year.

"The most important step we can take (for medical care) is to pass our bill to control hospital costs," Carter said in his nationwide address. Noting that the Senate this year passed a version of the controversial hospital cost containment program, Carter said "next year I will try again, and I believe the whole Congress will act to hold down hospital costs—if your own members of Congress hear from you. . . ."

In a White Paper on the anti-inflation program, Carter said that "voluntary actions of the medical

care industry have moderated the rate of medical care inflation." He was referring to the Voluntary Effort led by the AMA, AHA and the FAH which has succeeded in bringing hospital rate of increase down more than 2% compared with the rate a year ago.

Carter said the White House Council on Wage and Price Stability "will continue to monitor inflation in this sector and will assist the industry's own efforts to contain health care costs. However, the best way to make substantial inroads into the persistent medical care inflation problem is to enact cost containment legislation."

Carter said "the most significant action we can take to reduce inflation in medical care costs is to institute direct controls over hospital costs. . . . A deceleration of only one half of a percentage point in medical care costs is not commensurate with the extreme magnitude of these recent cost increases," according to the chief executive, who said the health care industry "is not one in which market forces can be expected to provide an adequate restraint on price increases."

The AMA applauded President Carter's call for voluntary controls on wage and price standards as part of his new anti-inflation program. "However," said James H. Sammons, M.D. executive vice president of the AMA, in assessing President Carter's remarks, "We are sorry that the President chose to single out the health care industry, and particularly hospitals, for mandatory controls at a time when that industry has been cited by his own Council on Wage and Price Stability as 'one of the very few industries in which deceleration has succeeded.'"

Doc Crop Props Shy Supply

The supply of physicians will be more than adequate to meet the nation's needs by 1990, according to a government study.

"Tremendous increases in health manpower supply (may) bring supply and requirements for most health professions more nearly into balance than at any time in the nation's recent history," said the report on the Status of Health Professions Personnel in the United States, prepared by the Department of HEW. The increases stem from the sharp expansion of training facilities and enrollments during the past decade due in part to federal programs to aid medical education.

The numbers of practitioners in the major health professions—medicine (including osteopathy), dentistry, optometry, pharmacy, podiatry, and veterinary medicine—are expected to increase from 40% to 70% between 1975 and 1990. In every discipline the supply is expected to increase faster than the population.

Physician supply is expected to rise from 379,000 in 1975 to almost 600,000 in 1990. The ratio of physicians to population is projected to rise from 177 per 100,000 people in 1975 to 241 per 100,000 in 1990.

announcements

CALENDAR OF MEETINGS

NATIONAL

1979

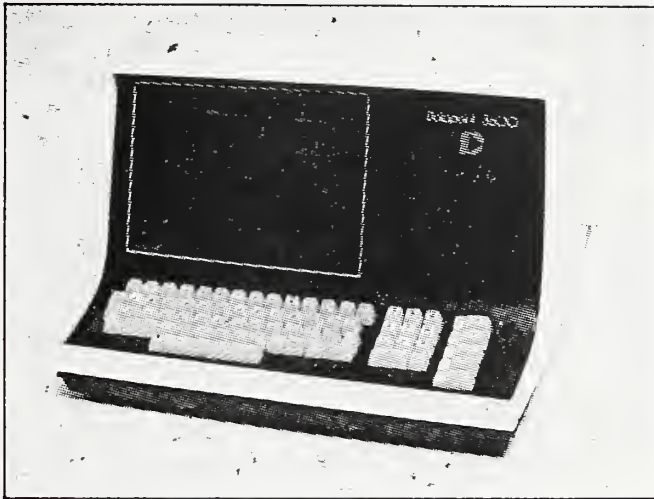
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| Jan. 14-19 | American Society of Contemporary Medicine and Surgery—Caesar's Palace, Las Vegas |
| Jan. 14-19 | American Society of Contemporary Ophthalmology—Caesar's Palace, Las Vegas |
| Jan. 15-16 | International Glaucoma Congress—Caesar's Palace, Las Vegas |
| Jan. 15-16 | International Congress of Cardiovascular Disease and Surgery—Caesar's Palace, Las Vegas |
| Jan. 15-17 | Society of Thoracic Surgeons—Hyatt & Adams Hotel, Phoenix, Ariz. |
| Jan. 20-26 | American Society of Clinical Pathologists—Phoenix, Ariz. |
| Jan. 22-26 | Southern Clinical Neurological Society—Pier 66 Hotel, Ft. Lauderdale, Fla. |
| Jan. 25-27 | Forensic Medicine and Society (sponsored by American Society of Law and Medicine)—Hotel del Coronado, San Diego |
| Jan. 27-31 | American College of Allergists—San Francisco |
| Jan. 28-31 | American Association for Hand Surgery—Stowe, Vt. |
| Feb. 11-15 | Current Concepts, Controversies, and Clinical Strategies in Gastroenterology—Century Plaza Hotel, Los Angeles |
| Feb. 12-17 | Dermatology Seminar — Intercontinental Hotel, Maui, Kehei, Hawaii |
| Feb. 24-
March 3 | Symposium on Neurotology—Snowmass, Aspen, Colo. |
| Feb. 25-
March 2 | American Physicians Fellowship Midwinter Assembly—Sonesta Beach Hotel, Key Biscayne, Fla. |
| Feb. 27-
March 2 | Symposium on Fundamental Cancer Research—Shamrock Hilton Hotel, Houston |
| Feb. 27-
March 2 | International Conference on Occupational Lung Disease—Hyatt Regency, Embarcadero in San Francisco |

Lab Licensing Service Moves

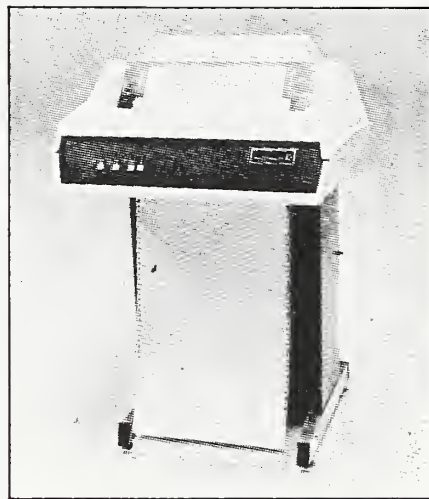
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The continuing medical education accreditation program of the TMA has full approval by the Liaison Committee on Continuing Medical Education. An accredited institution or organization may designate for Category 1 credit toward the AMA Physician's Recognition Award those CME activities that meet appropriate guidelines. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Ave., Nashville, TN 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

IN TENNESSEE

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

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Chest Diseases	James D. Snell, M.D.
Clinical Pharmacology	John A. Oates, M.D.
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Diabetes	Oscar B. Crofford, M.D.
Endocrinology	David Rabin, M.D.
	David N. Orth, M.D.
Gastroenterology	Steven Schenker, M.D.
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Infectious Diseases	Zell A. McGee, M.D.
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Radiology	A. Everett James, Jr., Sc.M., J.D., M.D.
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Cancer Chemotherapy	Vernon H. Reynolds, M.D.
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Application: For further information and application, contact: Paul E. Slaton, M.D., Director, Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

Continuing Education Schedule

Jan. 20-21	Comparative Leukemia Conference
Feb. 14-15	1st Annual Harry S. Abram Memorial Symposium on Medical Ethics
March 3	Sports Medicine (cosponsored with Nashville Academy of Medicine)
Spring, 1979	Annual L. W. Edwards Memorial Lecture in Surgery (1 hour)
Spring, 1979	2nd Annual Family Therapy Symposium
April 2-6	8th Annual James C. Overall Visiting Professor in Pediatrics
April 4-6	Management of Hypertension and Cardiac Emergencies (or Sudden Death) (21 hours)
April 13-14	3rd Annual Gynecological Oncology Course (10 hours)
April 20	Annual Barney Brooks Lectureship in Surgery (1 hour)
April 26	Annual Frank H. Luton Lecture in Psychiatry (1 hour)
April 27	American Academy of Orthopedic Surgeons Short Course—Hyatt Regency (7 hours)
April, 1979	Modern Concepts in Oncology
May 23-24	18th Annual Seminar in Psychiatry (for nonpsychiatrists) (11 hours)
May, 1979	Scientific Sessions of the Vanderbilt Medical Alumni Reunion
June 11-16	Family Practice Intensive Review (40 hours)

July 25-29 2nd Annual Symposium on Contemporary Clinical Neurology (16 hours)
 August- Internal Medicine Intensive Review
 October (33 hours)

For information contact: Vanderbilt Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

MEHARRY MEDICAL COLLEGE SCHOOL OF MEDICINE

Extended Continuing Education Program

Arrangements have been made with the following services and departments in the medical school to allow practicing physicians to participate in that service's activities for a period of one to four weeks. This program provides an opportunity for physicians to study in depth for a specified period. The schedule of activities is individualized in response to the physician's request by the participating department. The experience includes conferences, ward rounds, audiovisual materials and contact with patients, residents and faculty.

Participating Departments

Anesthesiology	Ramon S. Harris, M.D.
Family Practice	John Arradondo, M.D.
Internal Medicine	
Cardiology	John Thomas, M.D. Kermit R. Brown, M.D. Qamar A. Kahn, M.D.
Chest Disease	Joseph M. Stinson, M.D. Paul A. Talley, M.D. Edward A. Mays, M.D.
Dermatology	Thomas W. Johnson, M.D. David Horowitz, M.D.
Gastroenterology	Ludwald O. P. Perry, M.D. Buntwal M. Somayaji, M.D.
General Medicine	Edward A. Mays, M.D.
Hematology/Oncology	Robert S. Hardy, M.D.
Neurology	Calvin L. Calhoun, Sr., M.D. Gregory Samaras, M.D.
Obstetrics & Gynecology	Henry W. Foster, M.D.
Ophthalmology	Axel C. Hansen, M.D.
Orthopedics	Wallace T. Dooley, M.D.
Pathology	Louis D. Green, M.D. John C. Ashhurst, M.D.
Pediatrics	E. Perry Crump, M.D.
Surgery	
General	Louis J. Bernard, M.D.
Neurological	Charles E. Brown, M.D.
Thoracic and Cardiovascular	David B. Todd, M.D. Ira D. Thompson, M.D.
Urology	Marcelle R. Hamberg, M.D.

Fee: \$100 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1), American Academy of Family Physicians Continuing Education Accreditation and Continuing Education Units by Meharry Medical College.

Application: For further information contact Frank A. Perry, Sr., M.D., Director, Continuing Education, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

Continuing Education Schedule

April 19-22 Matthew Walker Surgical Symposium

—Hale McMillan Lecture (24 hours)
 May 23-25 Internal Medicine—1979 (18 hours)
 For information contact Frank A. Perry, Sr., M.D., Director of CME, Meharry Medical College, 1005 18th Ave., North, Nashville, TN 37208, Tel. (615) 327-6235.

UNIVERSITY OF TENNESSEE CENTER FOR THE HEALTH SCIENCES Continuing Education Schedule

This comprehensive listing of UTCHS courses includes programs of the Chattanooga, Knoxville, and Memphis units. The codes (C), (K), and (M) indicate the continuing education unit handling the arrangements for a particular program.

1979

Jan. 13-20	(K)	The Female Patient—Vail, Colo. (20 hours)
Jan. 24-26	(M)	Audiometric Orientation (24 hours)
Jan. 25-26	(C)	Allergies: A Clinical Approach
Feb. 3-10	(K)	Family Practice Review & Update—Caribbean Cruise—Departing from New Orleans with stop in Havana (15 hours)
Feb. 7-9	(M)	Gynecologic Urology
Feb. 9-10	(M)	Human Performance & Cardiovascular Health
Feb. 12-13	(M)	Practical Office Dermatology
Feb. 23-24	(C)	Gut Problems: A Clinical Approach—St. Petersburg, Fla. (Tierra Verde) (12 hours)
Feb. 25-28	(M)	Fundamentals of Otolaryngology
March 12-15	(C)	Diagnostic Radiology for the Primary Care Physician—Sahara Tahoe, Stateline, Nev.
March 18-24	(M)	Review Course for Family Physicians
March 21-23	(M)	Infection Control
March 29-30	(C)	Pediatrics
April 9-14	(C)	Infectious Disease for the Clinician—Freeport, Grand Bahamas
April 16	(M)	Modern Approach to Hypertension
April 19-21	(M)	Gynecologic Oncology
April 26-27	(C)	Orthopaedics
April 26-27	(M)	Pediatrics—Behavioral and Learning Disabilities
May 3-4	(M)	Electronystagmography
May 4-5	(K)	2nd Annual Family Practice Update and Review—Gatlinburg
May 7-9	(M)	4th Annual Symposium on Reproductive Medicine
May 10-11	(C)	Rheumatology in a Clinical Practice—Gatlinburg

May 11-12	(M)	Modern Advances in Cancer Treatment
May 17-19	(M)	Practical Otolaryngology for the Primary Care Physician—Gatlinburg
May 24-25	(M)	Nutrition Symposium
June 4-7	(M)	Basic Principles of Rhinoplasty
June 6-9	(M)	Basic Electrocardiography—Pickwick
June 7-10	(C)	Family Practice Review Course
June 20-23	(M)	Audiometric Orientation
June 24	(M)	Audiometric Orientation Refresher Course
June 25-28	(C)	OB/GYN Emergencies—Orlando, Fla.
July 25-27	(M)	Medical Aspects of Sports
Aug. 23-25	(M)	ENT Postgraduate Review
Sept. 13-15	(M)	Myocardial Infarction
Sept. 28-29	(M)	11th Memphis Conference on the Newborn

For further information about any of these courses, please call the appropriate individuals below:

- (C) Mr. LeRoy J. Pickles, Chattanooga, Tel. (615) 756-3370
- (K) Mr. Jim Farris, Knoxville, Tel. (615) 971-3345
- (M) Ms. Grace Wagner, Memphis, Tel. (901) 528-5547

or, write or telephone:

Dennis K. Wentz, M.D.
 Director of Continuing Education
 University of Tennessee Center for
 the Health Sciences
 62 S. Dunlap St.
 Memphis, TN 38163
 Tel. (901) 528-5606

EAST TENNESSEE STATE UNIVERSITY

Continuing Education Schedule

Jan. 12	Stress and the Physician
Feb. 6	Occupational Medicine

For information contact Dr. Charles F. Johnson, Assistant Dean, East Tennessee State University, College of Medicine, Dept. of Continuing Medical Education, Johnson City, TN 37601, Tel. (615) 929-5364.

IN SURROUNDING STATES

UNIVERSITY OF KENTUCKY

Mini-Residencies for Medical and Surgical Practitioners in Office Management Of Emotional Problems

The objective of this course is to give physicians an ideal emotional counseling technique that fits busy office practices. The technique uses a concept

of emotions that is consistent with human anatomy and psycho-physiology. Yet, the technique requires no more physician time or patient cost than routine evaluations of new patients. Finally, the technique is readily understandable and easy for practitioners to apply.

One, two and three week courses. Minimum of 40 hours per week. *Tuition Fee:* \$350 per week for the 1st & 2nd week of training; \$500 for 3rd week of supervised practice with patients in the Intensive RBT Treatment Program.

For further information contact: Maxie C. Maultsby, Jr., M.D., Office of Continuing Medical Education, Dept. of RBT, University of Kentucky, Lexington, KY 40506.

BOWMAN GRAY SCHOOL OF MEDICINE

Courses in Ultrasound

An eight-week course in sonic medicine will be offered at Bowman Gray School of Medicine on April 2-May 25, 1979.

Credit: 30 hours per week in AMA Category 1. An additional two-day real time course is offered for obstetricians on March 8-9, 1979. *Credit:* 10 hours per day in AMA Category 1.

Courses in Abdominal Real Time Sonography

A series of six week-long courses on the use of real time ultrasound in abdominal studies will be offered at Bowman Gray School of Medicine on the following dates: March 12-16, June 11-15, July 16-20, Aug. 6-10, and Dec. 9-13, 1979. *Credit:* 30 hours per week in AMA Category 1.

For information contact James F. Martin, M.D., Director, Center for Medical Ultrasound, Bowman Gray School of Medicine, Winston-Salem NC 27103.

MEDICAL COLLEGE OF GEORGIA

Continuing Education Schedule

Feb. 8-9	Clinical Psychiatry
March 6-9	Emergency Medicine—Tamarron Ski Resort, Colorado
March 15-16	Reproductive Endocrinology
March 19-21	Neurologic Disorders
March 26-28	Ophthalmology*
April 4-6	Cardiology
April 19-20	Preventive Medicine
May 10-11	The Medical Office Team
June 7-9	Internal Medicine*
July 16-20	Taxes and Investments*
Aug. 6-8	Pediatrics*

*Presented at Holiday Inn of Jekyll Island, Ga.

For information contact Division of Continuing Education, Medical College of Georgia, Augusta, GA 30901, Tel. (404) 828-3967.

UNIVERSITY OF MISSISSIPPI

March 1-3 6th Annual Surgical Forum—Holiday Inn Downtown, Jackson, Miss. *Credit:* 17 hours AMA Category 1. *Fee:* \$175, advanced registration required.

For information contact Division of Continuing Health Professional Education, University of Mississippi Medical Center, 2500 N. State St., Jackson, MS 39216, Tel. (601) 968-4914.

OF SPECIAL INTEREST

AMERICAN COLLEGE OF PHYSICIANS

A comprehensive schedule of continuing medical education activities for a 12-month period beginning in September, 1978, includes regional meetings and postgraduate courses to be held at various locations throughout the United States and Canada.

The ACP Regional Meetings, lasting one to four days, are designed for practicing internists and physicians in related fields. They bring new developments in the basic sciences and clinical medicine from major research centers to internists who are unable to travel to medical meetings outside of their state, and also provide a vehicle for local physicians to report to their colleagues on investigative work and clinical experiences in the wide scope of subject areas included in the practice of internal medicine.

The ACP Postgraduate Courses provide the opportunity for in-depth study in fields covered by internal medicine and its subspecialties. Averaging three to five days, they are directed toward practicing physicians and are presented in association with medical schools and other teaching institutions.

For information and registration contact: Registrar, Postgraduate Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

Regional Meetings

See September 1978 issue for complete 1978-1979 listing

Postgraduate Courses

See September 1978 issue for complete 1978-1979 listing

- Jan. 11-13 Recent Advances in Gastroenterology—Little Rock, Ark.
- Jan. 22-26 Present Concepts in Internal Medicine—San Francisco
- Jan. 29-Feb. 2 5th Stanford-Palo Alto Medical Research Foundation Winter Course in Infectious Diseases, Keystone, Colo.
- Feb. 5-9 Intensive Care Medicine—New York
- Feb. 12-14 Hematology: From the Laboratory to the Bedside—Lake Tahoe, Nev.

- Feb. 14-16 Nephrology: Current Theory and Practice—Montreal
- March 5-8 Neurology for the Internist—Rochester, Minn.
- March 7-9 Problem Solving in Gastroenterology—Temple, Tex.
- March 14-16 Pulmonary Medicine—Update 1979—Denver
- March 21-23 Update in Infectious Diseases—Philadelphia
- March 22-24 Clinical Recognition and Management of Heart Disease, Drug Therapy—Tucson, Ariz.

BETH ISRAEL HOSPITAL

Denver, Colorado

See September 1978 issue for listing

UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON

- Jan. 26-27 Radiology of the Acutely Ill and Injured Patient—Update 1979—Stouffer's Hotel, Greenway Plaza, Houston. *Credit:* 14 hours AMA Category 1; ACEP and AAFP applied for. *Fee:* \$150.

For information contact Division of Continuing Education, University of Texas Health Science Center at Houston, P.O. Box 20367, Houston, TX 77025, Tel. (713) 792-4671.

UNIVERSITY OF MIAMI

- Jan. 29-Feb. 2 6th Annual Neurological Update Symposium—Konover Hotel, Miami Beach. *Credit:* 6, 24, or 30 hours AMA Category 1.

For information contact Division of Continuing Medical Education D23-3, University of Miami School of Medicine, P.O. Box 016960, Miami, FL 33101, Tel. (305) 547-6716.

DUKE UNIVERSITY MEDICAL CENTER

- Feb. 12-16 Current Concepts in Diagnostic Radiology including Ultrasound & CT Scanning—Acapulco Princess Hotel, Mexico. *Credit:* 30 hours AMA Category 1. *Fee:* physicians, \$250; in training, \$125.

For information contact Robert McLelland, M.D., Radiology—Box 3808, Duke University Medical Center, Durham, NC 27710, Tel. (919) 684-4397.

PEDIATRIC DERMATOLOGY SEMINAR

Feb. 17-25 6th Annual Pediatric Dermatology Seminar—cruise aboard the M/V Buccaneer in the Galapagos Islands. *Credit: AMA Category 1.*

For information contact Ginter Kahn, M.D., 16800 N.W. 2nd Ave., N. Miami Beach, FL 33169.

ALTON OCHSNER MEDICAL FOUNDATION

March 30-31 Practical Internal Medicine for the Practitioner—Ochsner Medical Institutions, Monroe Hall, New Orleans. *Credit: 12 hours AMA Category 1 and AAFP elective. Fee: physicians, \$110; residents, \$55.*

For information contact Continuing Education, Alton Ochsner Medical Foundation, 1516 Jefferson Hwy., New Orleans, LA 70121, Tel. (504) 837-3000.

NETWORK FOR CONTINUING MEDICAL EDUCATION

Schedule for Upcoming Programs

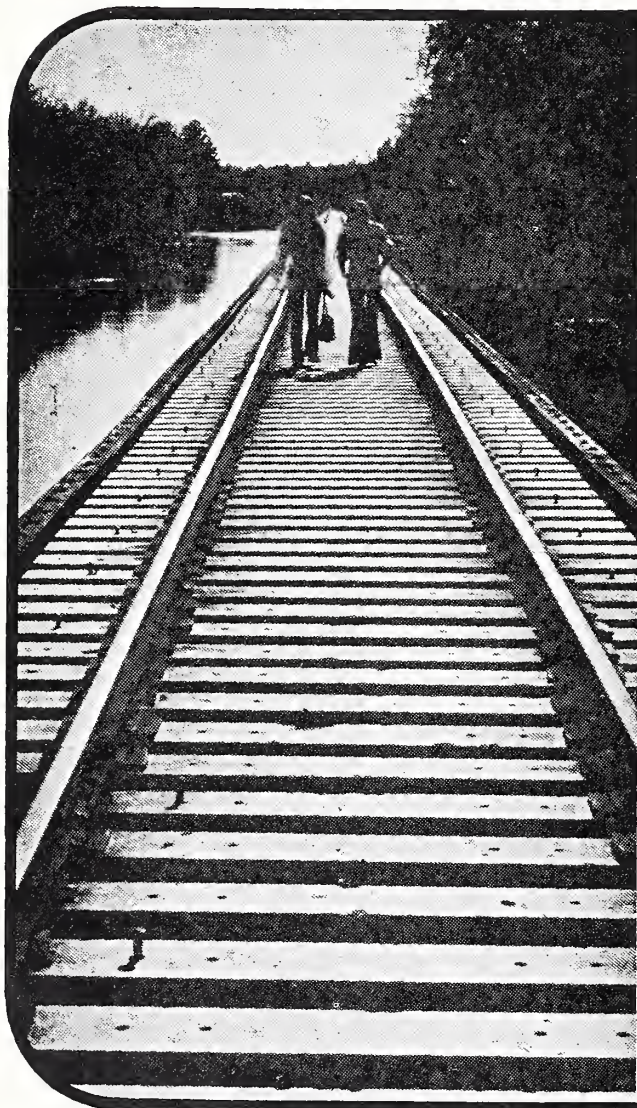
Dec. 25-Jan. 7 Diagnosing Jaundice: Applications of Technological Progress—with Fenton Schaffner, M.D., Mt. Sinai School of Medicine, New York City.

Transient Ischemic Attack: Etiology and Diagnosis—with Mark L. Dyken, M.D., Indiana University School of Medicine, Indianapolis.

Elective Induction of Labor: Is It Justifiable?—with Theodore M. King, M.D., Ph.D., Johns Hopkins University School of Medicine and Hospital, Baltimore.

Jan. 8-21 Transient Ischemic Attack: Early Management Methods—with Mark L. Dyken, M.D., Indiana University School of Medicine, Indianapolis.

Prophylaxis for Viral Hepatitis—with Richard H. Parker, M.D., Howard University School of Medicine, Veterans Administration Medical Center, Washington, D.C.



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Highlights of the TMA Board of Trustees Meeting

October 15, 1978

The following is a summary of the actions taken by the Board of Trustees of the Tennessee Medical Association at its regular, fourth quarter meeting in Nashville.

THE BOARD:

EMS Recommendations

Approved seven recommendations from the Emergency Medical Services Committee of the Division on Scientific Services: (1) to seek future resolution at the local level of inadequate coverage by psychiatrists in hospital emergency rooms; (2) endorsed the concept that every hospital emergency department should adopt treatment guidelines; (3) agreed to continue to work for the updating of Categorization of Hospital Emergency Room Guidelines; (4) appointed a subcommittee to investigate and/or develop in Tennessee schools an emergency first aid program; (5) agreed to sponsor on April 6, 1979, an all-day scientific program on the theme of "Emergency Medical Care" with the morning session centered around a discussion on the "Multiple-Injured Patient" and the afternoon session to be devoted to "Primary Management of Critical Medical Emergencies"; (6) agreed to sponsor for emergency medical technicians and others a two-day program in Bolivar in early 1979 on farm injuries; and (7) approved sponsor for emergency medical technicians and others a two-day junction with TSSAA and MTSU similar to the program held in August, 1978, which attracted 350 coaches and trainers.

Rural Health Conference

Heard the Committee on Rural Health's report regarding the Sixteenth Annual Rural Health Conference which was conducted Oct. 4, 1978 on the Carson-Newman campus in Jefferson City before an audience of 373.

Peer Review Reimbursement

Approved a recommendation from the Peer Review Committee regarding the reimbursement by insurance companies for expenses incurred by the TMA committee while reviewing their claims. Reimbursement will be only for the actual costs incurred by the TMA such as travel expenditures, meals, conference calls, and reproduction of materials.

Medicaid Data Confidentiality

Received for information a report from Mr. Dave Morison, TMA staff attorney, on the confidentiality of Medicaid data.

New Health Planning Committee

Approved four recommendations of the Governmental Medical Services Committee: (1) that a special Health Planning Committee be appointed to deal only with health planning and its ramifications; (2) that the TMA begin to examine the means of providing adequate staffing for such a committee; (3) that those physicians on the Governmental Medical Services Committee who serve on HSA boards and committees be submitted to the Board as prospective members of

the permanent committee; and (4) that specialty society representatives be invited to meet with this permanent committee.

Health Planning Workshop

Heard a report from Mr. Raymond Schklar, assistant executive director of the Nashville Academy of Medicine, regarding a Regional Health Planning Workshop he attended in Atlanta, Sept. 19-20, 1978, on behalf of TMA. Robert H. Haralson, M.D., of Maryville also attended as a TMA representative and his written report and recommendations were received.

Perinatal Care System Guidelines

Accepted for information but did not endorse guidelines for regionalization, hospital care levels, staffing and facilities of Tennessee Perinatal Care System from the Committee on Maternal and Child Care.

Membership Criteria

Approved recommendations from the TMA Judicial Council for a bylaw amendment regarding membership criteria in county medical societies.

Impaired Physicians

Heard a report from TMA President John Dorian, M.D., on the status of the newly formed TMA Impaired Physician Committee, which will go into effect Jan. 1, 1979.

Auxiliary Report

Heard a report from Mrs. Hoyt Crenshaw, TMA Auxiliary president, regarding the latest developments of the Auxiliary and the projects with which it is involved.

Appointments

Appointed Mrs. Lewis George to a one-year term on the IMPACT board of directors, representing the TMA Auxiliary.

Appointed for one-year terms to the board of directors of IMPACT were Joe DeLozier, M.D., Knoxville, to replace Dale A. Teague, M.D., Knoxville, who was ineligible for reappointment, and Jack E. Butterworth, Jr., M.D., 1st District; William C. Patton, M.D., 3rd District; James C. Bradshaw, Jr., M.D., 4th District; Robert W. Ikard, M.D., 5th District; Oscar M. McCallum, M.D., 6th District; Arden J. Butler, Jr., M.D., 7th District; and W. David Dunavant, M.D., 8th District.

Nursing Home Guidelines

Resubmitted to the Peer Review Committee for evaluation and comments certain guidelines regarding nursing homes and certification of patients. The guidelines define terms as requested by the Tennessee Department of Public Health.

New Group Workmen's Compensation Plan

Endorsed a proposal for TMA to offer a group Workmen's Compensation plan to the membership which is estimated to save up to 40% over what is currently being paid in premiums by physicians.

TENNESSEE MEDICAL ASSOCIATION
144TH ANNUAL MEETING
April 4-7, 1979
Airport Hilton Inn, Memphis, Tennessee

LOCATIONS WANTED

INTERNIST-CARDIOLOGIST—age 30, graduate of Bangalore Medical College (India) in 1971—desires associate, clinical, industrial or institutional practice in Tennessee. Board eligible, internal medicine, cardiology. Married. Available July, 1979. LW-1386

GENERAL SURGEON—age 34, graduate of Vanderbilt University College of Medicine in 1970—desires clinical practice in Tennessee city with 20,000+ pop. Board eligible, general surgery. Available September, 1979. LW-1387

INTERNIST-CARDIOLOGIST—age 33, graduate of University of Baghdad College of Medicine (Iraq) in 1970—desires associate, solo or institutional practice in Tennessee city with 50,000+ pop. Board certified, internal medicine; board eligible, cardiology. Married. Available July, 1979. LW-1388

PEDIATRICIAN—age 33, graduate of Medical College of Kerala (India) in 1967—desires solo practice in Tennessee city with 20,000+ pop. Board eligible, pediatrics. Married. Available March, 1979. LW-1389

INTERNIST with interest in hematology—age 33, graduate of University of North Carolina in 1970—desires associate or clinical practice in East Tennessee city with 10,000+ pop. Married. Available July, 1979. LW-1390

FAMILY PHYSICIAN-GENERAL SURGEON—age 45, graduate of Cairo University (Egypt) in 1946—desires practice in Tennessee. Board certified, surgery. Married. Available within short period after agreement. LW-1391

INTERNIST-CARDIOLOGIST—age 31, graduate of Northwestern University College of Medicine in 1973—desires associate or clinical practice in East or Middle Tennessee city with 90,000+ pop. Board certified, internal medicine; board eligible, cardiology. Married. Available July, 1979. LW-1392

FAMILY PHYSICIAN—age 47, graduate of University of Guadalajara College of Medicine (Mexico) in 1976—desires associate practice in Tennessee city with 5,000+ pop. Married. Available within short period after agreement. LW-1393

INTERNIST-GASTROENTEROLOGIST—age 30, graduate of Louisiana State University College of Medicine in 1974—desires clinical practice in Tennessee. Board certified, internal medicine; board eligible, gastroenterology. Available July, 1979. LW-1394

NEUROLOGIST—age 31, graduate of King Edward Medical College (Pakistan) in 1972—desires associate, clinical or solo practice in Tennessee city with 60,000+ pop. Board eligible, neurology. Married. Available July, 1979. LW-1395

PHYSICIANS WANTED

FAMILY PHYSICIAN or INTERNIST—needed in Parsons for clinic practice. Fully equipped 37-bed hospital in area. Excellent recreational area. PW-391

FAMILY PHYSICIAN, OPHTHALMOLOGIST, PEDIATRICIAN, PSYCHIATRIST—needed in Tullahoma, progressive college community in Middle Tennessee. Ultra-modern 100-bed hospital with excellent CCU and other supportive facilities. Thirteen physicians on active medical staff. Year-round recreational attractions. PW-414

EMERGENCY ROOM PHYSICIAN, OTOLARYNGOLOGIST, PEDIATRICIANS—needed in Nashville for association with modern suburban hospital that is expanding. Office space, equipment and housing available. Fifteen physicians at this location. PW-456

FAMILY PHYSICIAN, INTERNIST, PEDIATRICIAN and OB-GYN—needed in Martin, a West Tennessee college town of 8,000 with drawing area in excess of 45,000 including college students. Must be board eligible or certified. Office space and equipment available. Near 78-bed accredited hospital with modern facilities. Salary plus fringe benefits. PW-457

OB-GYN—needed in Murfreesboro in Middle Tennessee by a 13-physician multispecialty clinic. Excellent drawing area. Starting salary negotiable leading to full corporate participation. PW-471

FAMILY PHYSICIAN and INTERNIST—needed in Brownsville, a West Tennessee city with drawing area of 35,000. Progressive rural community located 55 miles from Memphis and 45 miles from Jackson. PW-472

INTERNIST or FAMILY PHYSICIAN—needed for clinic practice in Knoxville in East Tennessee. Office space and office equipment available. PW-494

FAMILY PHYSICIAN or INTERNIST—needed in Kingsport as associate in clinic practice, working into partnership if mutually agreeable. PW-507

PHYSICIAN—needed in Knoxville for outpatient student health care in new clinic facility serving 30,000 students. Seven staff physicians including psychiatrist. Liberal benefits including paid liability insurance and retirement program. Must be board certified or eligible in family practice, internal medicine or pediatrics. PW-508

OB-GYN—needed in Murfreesboro to associate with three other OB-GYNs. Increased patient load necessitates additional partner. Forty physicians presently in area. Must be board certified or eligible. Office space and housing available. PW-509

1978 MEMBERSHIP ROSTER

TENNESSEE MEDICAL ASSOCIATION

An alphabetical listing of members of The Tennessee Medical Association by County Medical Society is published as a service to the membership. The various membership categories are noted by special symbols. * denotes Veteran Status; ‡ denotes Post-Graduate Status; † denotes Military Status.

BEDFORD COUNTY MEDICAL SOCIETY

Shelbyville
Donald D. Barnes
Lana S. Beavers
*W. L. Chambers
Albert L. Cooper
John S. Derryberry
Taylor Farrar
Joseph H. Feldhaus
Sue W. Johnson
Grace E. Moulder
Earl Rich
Aubrey T. Richards
B. Carl Rogers
C. T. Stubblefield
Sara Womack

BENTON-HUMPHREYS MEDICAL SOCIETY

Camden
W. H. Blackburn
R. I. Bourne, Jr.
Joe S. Butterworth
New Johnsonville
James J. Lawson

Waverly
Maysoon S. Ali
Subhi D. S. Ali
Mark Hartley
Wallace J. McClure
Dorris A. Sanders
Joseph W. Stephens
Arthur W. Walker
Courtland, AL
Harold L. Blanton

BLOUNT COUNTY MEDICAL SOCIETY

Alcoa
J. S. Henderson, Jr.
*James S. Henry
Colin L. Kamperman
J. Thomas Mandrell
Charles D. Wohlwend
Louisville
Samuel D. Evans
Bruce Green
James Hoyme

Maryville
O. K. Agee
Kyung M. Ahn
Marvin R. Beard
J. A. Belknap
Billy H. Blanks
John A. Bollinger, Jr.
John H. Bowen
H. A. Callaway, Jr.
James M. Callaway
J. W. Christofferson
William C. Crowder
W. W. Crowder
James R. Delashmit
Sandra Denton
David C. Dorr
William E. Elliott
Raymond A. Finney
Ted L. Flickinger
R. H. Haralson, Jr.
R. H. Haralson, III
C. N. Hatfield
Louis E. Haun
Paul W. Hoffmann
James T. Holder
Cecil B. Howard
John R. Huffman
Stephen P. Humphrey
John J. Ingram, III
Homer L. Isbell
Elgin P. Kintner
Sam S. Lambeth
Roy W. Laughmiller
Frank S. Lovingood
*John F. Manning
Kenneth Marmon
Gordon McCall
David L. McCroskey
N. A. McKinnon, Jr.
James H. Millard
Robert D. Mynatt
H. S. Nelson

Henry S. Nelson, Jr.
M. D. Peterson
Jack Phelan
James N. Proffitt
Robert D. Proffitt
Bainard P. Ramsey
Charles Raper
James Ricciardi
Robert W. Seaton
O. L. Simpson, Jr.
J. B. Smalley, Jr.
H. T. Vandergriff
†Christopher Vinsant
Lowell E. Vinsant
J. A. Yarborough

Rockford
Robert F. Leyen
Seymour
Russell H. Dreyer
Townsend
†Richard J. Mynatt
Fayetteville, NC
Julian C. Lentz

BRADLEY COUNTY MEDICAL SOCIETY

Chattanooga
William O. Campbell
Cleveland
William T. Aldrich
Robert L. Allen
John M. Appling
Charles W. Arnold, Jr.
Marvin R. Batchelor
John M. Bryan
Glenn Byers
Peter Bzik
John W. Chambers
Allan Chastain
Chalmer Chastain, Jr.
Robert H. Cofer
Ed N. Duncan
Sandra M. Elam
A. Estes Felker
Jack R. Free
Donald B. Gibson
Maurice S. Goldman
Robert D. Hays
C. Richard Hughes
Wm. F. Johnson, Jr.
William W. Johnson
Harry B. Johnston
Frank K. Jones, Jr.
Cecil H. Kimball
M. Bart Knight, Jr.
C. A. Kyle, Jr.
James C. Lowe
Gary K. McAllister
*Joseph McCoith
S. G. Meredith, Jr.
Hays Mitchell
Jack Monnig
John Murphy
Nicholas Newton
John Parkinson
E. Harris Pierce
John Powell
William Proffitt
Don E. Robinson
John A. Rogness
Charles Romaine
Fenton L. Scruggs
William R. Smith
*W. C. Stanbery
Edwin G. Swart, Jr.
Claud H. Taylor
Ronald W. Thomas
James R. Thurman
Gilbert A. Varnell
Clyde P. Younger
Copperhill
William R. Lee
Blue Ridge, GA
W. C. Zachary, Jr.
Robbins AFB, GA
†I. C. Humphreys, Jr.

BUFFALO RIVER VALLEY MEDICAL SOCIETY
Centerville
Parker D. Elrod

Bertie L. Holladay
L. Frank McBrayer
James H. McGinley

Dickson
Robert M. Coleman
Hohenwald
Veena Anand
Virender Anand

Linden
Gordon H. Turner, Jr.

Parsons
Charles M. Alderson
James A. Meeks
Michael G. Molitor
James R. Wilkinson

CAMPBELL COUNTY MEDICAL SOCIETY

Harrogate
George L. Dav
Roy C. Ellis, Jr.
G. Stanley Thompson

Jellico
Charles A. Prater
Jesse L. Walker
Charles H. Wilkens

LaFollette
E. G. Cline, Jr.
Thomas L. Cohen
J. D. Crutchfield
M. L. Davis
James C. Farris
Ronald D. Hall, III
John C. Pryse
*Roscoe C. Pryse
L. J. Seargeant, Jr.
Burgin H. Wood

Lake City
John S. Burrell
Curtis C. Sexton

CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY

Athens
*Hollis C. Miles
Chattanooga
Jerome H. Abramson
Chester G. Adams
J. E. Adams, Jr.
John W. Adams, Jr.
William P. Aiken
Edgar D. Akin
J. T. Albritton
Hilda N. Alisago
Billy Jason Allen
Charles H. Alper
Harry S. Anderson
Coleman L. Arnold
Ira Lee Arnold
Joseph S. Atkinson
Joel Eugene Avery
A. Merton Baker, Jr.
Fred B. Ballard, Jr.
Samuel L. Banks
W. A. Banks, Jr.
J. R. Baredy
Juancho C. Bautista
G. E. Beckmann, Jr.
Robert K. Berglund
John Bruce Berry
William B. Berry
E. F. Besemann
Samuel S. Binder
W. R. Bishop
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